Installation Guide

English

Dolev 800+/800V²/ 800V³

399Z1R556B

www.creo.com

Dolev 800V+/800V^2/800V^3

Installation Guide

creo™

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4,558,302	5,339,176	5,561,691	5,764,374	5,998,067	6,159,659	6,366,339
4,743,091	5,343,059	5,568,595	5,764,381	6,003,442	6,164,637	6,371,026
4,992,864	5,355,446	5,576,754	5,771,794	6,014,471	6,180,325	6,377,739
5,049,901	5,359,451	5,579,115	5,785,309	6,016,752	6,181,362	6,387,597
5,079,721	5,359,458	5,592,309	5,813,346	6,031,932	6,181,439	6,396,422
5,103,407	5,367,360	5,594,556	5,818,498	6,043,865	6,186,068	6,396,618
5,111,308	5,384,648	5,600,448	5,854,883	6,060,208	6,189,452	6,407,849
5,113,249	5,384,899	5,608,822	5,861,904	6,063,528	6,191,882	6,414,755
5,122,871	5,412,491	5,615,282	5,861,992	6,063,546	6,204,874	6,422,801
5,124,547	5,412,737	5,625,766	5,875,288	6,072,518	6,208,369	6,435,091
5,132,723	5,420,702	5,636,330	5,894,342	6,090,529	6,214,276	6,441,914
5,150,225	5,420,722	5,649,220	5,900,981	6,096,461	6,217,965	6,450,092
5,153,769	5,459,505	5,650,076	5,934,196	6,098,544	6,260,482	6,456,396
5,155,782	5,473,733	5,652,804	5,942,137	6,107,011	6,266,080	6,476,931
5,157,516	5,481,379	5,680,129	5,946,426	6,112,663	6,266,134	6,477,955
5,208,818	5,488,906	5,691,823	5,947,028	6,115,056	6,267,054	6,509,903
5,208,888	5,497,252	5,691,828	5,958,647	6,121,996	6,268,948	
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	
5,283,140	5,517,359	5,699,740	5,973,801	6,136,509	6,299,572	
5,291,273	5,519,852	5,708,736	5,986,819	6,137,580	6,318,266	
5,323,248	5,526,143	5,713,287	5,995,475	6,147,789	6,352,816	

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Who Should Use This Manual

This guide describes the options available with the Dolev® 800V+/800V^2/800V^3 imagesetter. The Dolev 800V+/800V^2/800V^3 imagesetter is a high-speed large-format internal drum output device. The large exposure format is convenient for tradeshops and printers. In addition, the Dolev 800V+/800V^2/800V^3 imagesetter supports the preparation of plate-ready separation films using the Creo Imposition feature.

This guide includes the following chapters:

Chapter 1 Safety Precautions, including sections describing General safety precautions and Laser Safety precautions which must be observed when operating the Dolev 800V+/800V^2/800V^3 Imagesetter.

Chapter 2 Genral Description, describes the main features of the Dolev 800V+/800V^2/800V^3 Imagesetter and the technical specifications.

Chapter 3 Site Preparation, includes a pre-installation checklist and sets out guidelines for Space, Electrical and Environmental Requirements.

Chapter 4 Hardware Installation, describes the unpacking procedure and operations for installing the imagesetter such as: removing shipping safeguards, opening doors, levelling the imagesetter, film path selector position, electrical connections and connecting to the host.

Chapter 5 Start Operation, describes loading and unloading supply cassettes, mounting media into the supply cassettes. It describes automatic media loading (set loading). It also describes the output cassette and the punch system.

Chapter 6 Data Configuration Setting, **Data Configuration Setting**, explains how to configure the imagesetter with the Brisque.

Appendix, describes the basic customer training program that is given to the operator after the imagesetter has been installed.

1

Safety Precautions

Read this chapter carefully before installing, operating, or maintaining the Dolev 800V+/800V^2/800V^{3}Imagesetter.

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Laser Safety Precautions 6

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1.1 Installation Safety Precautions

Read the user safety instructions in the *Dolev 800V+/800V²/800V³ User Guide*, 399Z1R557B, as an indispensable part of the service safety precautions.



CAUTION: Installation must be done by authorized service personnel only.



CAUTION: To minimize the risk of fire, no connections to the supply are to be made before setting the line voltage selector !

1.1.1 Setting Line Voltage Selector

The Line Voltage selector is located on the outside of the Standard controller box behind the right side door of the imagesetter.



Figure 1: Voltage Selector

The selector is set at factory to 220V. The setting of the selector switch must match the line voltage at your site.

To establish matching, proceed as follows:

1. Make sure that the Master circuit breaker and the **On/Off** switch are both switched off.
2. Measure the line voltage at the wall outlet.

Note: The measured line voltage should suit the nominal line voltage in the country of installation.

a. If the measured line voltage is within the 180V - 209V range, set the selector to **200.**

b. If the measured line voltage is within the 210V - 229V range, verify that the selector switch is set to **220.**

c. If the measured line voltage is within the 230V - 254V range, set the switch to **240** or **250** (as marked on the selector).

1.1.2 Selecting the Power Supply Cord

Dolev 800V is supplied **without** a power supply cord.

To select a cord, proceed as follows:

In the **United States** and **Canada**

Use a UL-listed/CSA-certified cord set that includes a flexible cord of type SJ, SJE, SJO, SJOO, SJT, SJTO, SJTOO, S, SE, SO, SOO, ST, STO, or STOO, with minimum 16 AWG, three (3) conductors. The cord set must include a parallel blade grounding type attachment plug (min. 12 Amp), and an IEC 320 type appliance coupler.

In **Europe**

Use only a three (3) conductors HAR-type cord. The cord set used must be approved for the country in which the equipment is installed. The cross section of the conductor must be at least 1.25 mm^2 and the cord set must include a grounding type attachment plug and an IEC 320 type appliance coupler.

1.2 General Safety Precautions

1.2.1 Disconnection from the Mains Supply

Dolev $800V^3$/$800V^4$ are equipped with a Master circuit breaker, located at the lower rear part of the imagesetter, and an **On/Off** switch, located near the Control Panel at the front part of the imagesetter.

To achieve complete disconnection from the mains supply, the Master circuit breaker must be disconnected (switched to **0** position).



WARNING: Switching off only the **On/Off** switch leaves several circuits of the imagesetter energized.

1.2.2 Lithium Battery

The Dolev 800V+/800V^2/800V^{3}contain a Lithium battery in the CPU board.

The battery should be replaced by qualified service personnel. The battery must not to be replaced by the user.



DANGER: Danger of explosion if battery is incorrectly replaced !

- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of the used batteries according to the manufacturer's instructions.

1.2.3 Connection to Other Equipment (Peripherals)

The Dolev 800V+/800V^2/800V^3 is intended to be connected to other equipment through electronic data cable.

1.2.4 Interlocks

Opening a side door or taking out the loading assembly:

Safety Interlock switches are designed to disconnect power from the motors and deactivate the laser.



WARNING: Some wiring, located in the Electronic box and the optical tray, will remain energized if the master circuit breaker is not switched off.

While the Imagesetter is switched on and the interlocks are defeated:

- There is power present in the electrical, optical and mechanical assemblies.



WARNING: Electrical, laser and mechanical hazards exist!

1.3 Laser Safety Precautions



WARNING: Even brief exposure of the eyes to the laser beam or its reflections may cause permanent loss or permanent degradation of eyesight.



DANGER: Use of controls and/or adjustments, or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

The Dolev 800V+/800V^2/800V^{3}imagesetter is installed and serviced exclusively by specialized technicians trained in the proper procedures for working with and adjusting the laser beam power and its optical path.

- Up to **5** milliwatt of laser power at a wavelength of approx. 650 nm may be present in the Output optical connector of the Static optics assembly (in Dolev 800V^4 there are 2 static optic assemblies), Dynamic optics assembly, Optical coupler, Optical fibers, Optical fibers connectors, and on the inside of the imagesetter drum.
- Up to **10** milliwatt of laser power at the same wavelength may be present inside the Static optics assemblies.



WARNING: This laser radiation is hazardous to the eye and skin! Avoid direct exposure to the beam and its reflections!



WARNING: The Fiber connector locker ensures that the user cannot open the optic fiber connector. Do not forget to return the locker to its place if removed.

1.4 Interlock Defeat Safety Precautions

Service the machine when off, whenever possible.

The service engineer is allowed to defeat the safety interlocks **only** when taking the appropriate safety measures.



WARNING: When performing focus calibration, follow the safety precautions below and set the laser beam to a minimum power level no more than than 1 milliwatt).



WARNING: Make sure that none of the optical connectors are dismantled!



WARNING: When either of the two internal side protective barriers are removed, make sure that no object obstructs the laser beam inside the drum. This includes pieces of film, tools, and any object that the laser beam can strike. The beam is permitted to strike the film only if it is wrapped properly and smoothly inside the drum.



WARNING: Beware of mechanical hazards caused by the loading, unloading, the spinner, and other motors.



WARNING: When servicing the imagesetter, remove ties, roll up long sleeves, remove jewelry and gather long hair.



WARNING: Do not leave the imagesetter unattended while interlocks are defeated!



WARNING: The loading, unloading and other motors carry 230 volts AC. Do not tamper with the motors or its electrical feed line.

1.5 Warning Labels

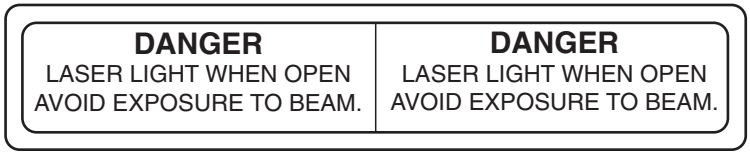
The following pages show the labels and their locations. Replace missing or damaged labels.



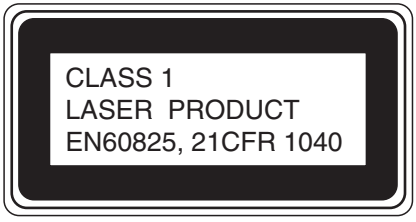
K2G954



K2G955



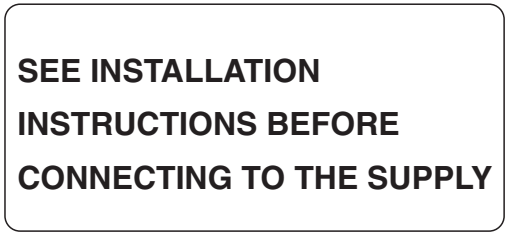
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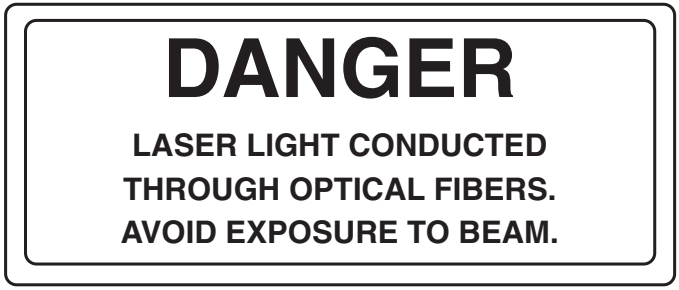
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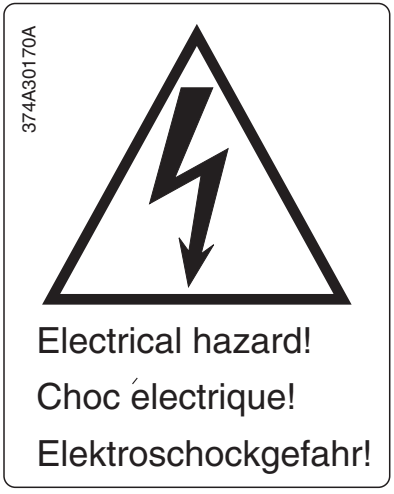
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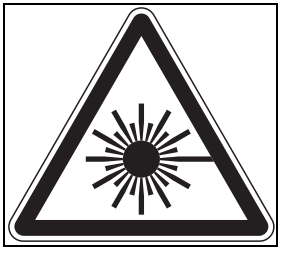
K8F711



K8F712



374A7B951 (374A30170)



374A2G961

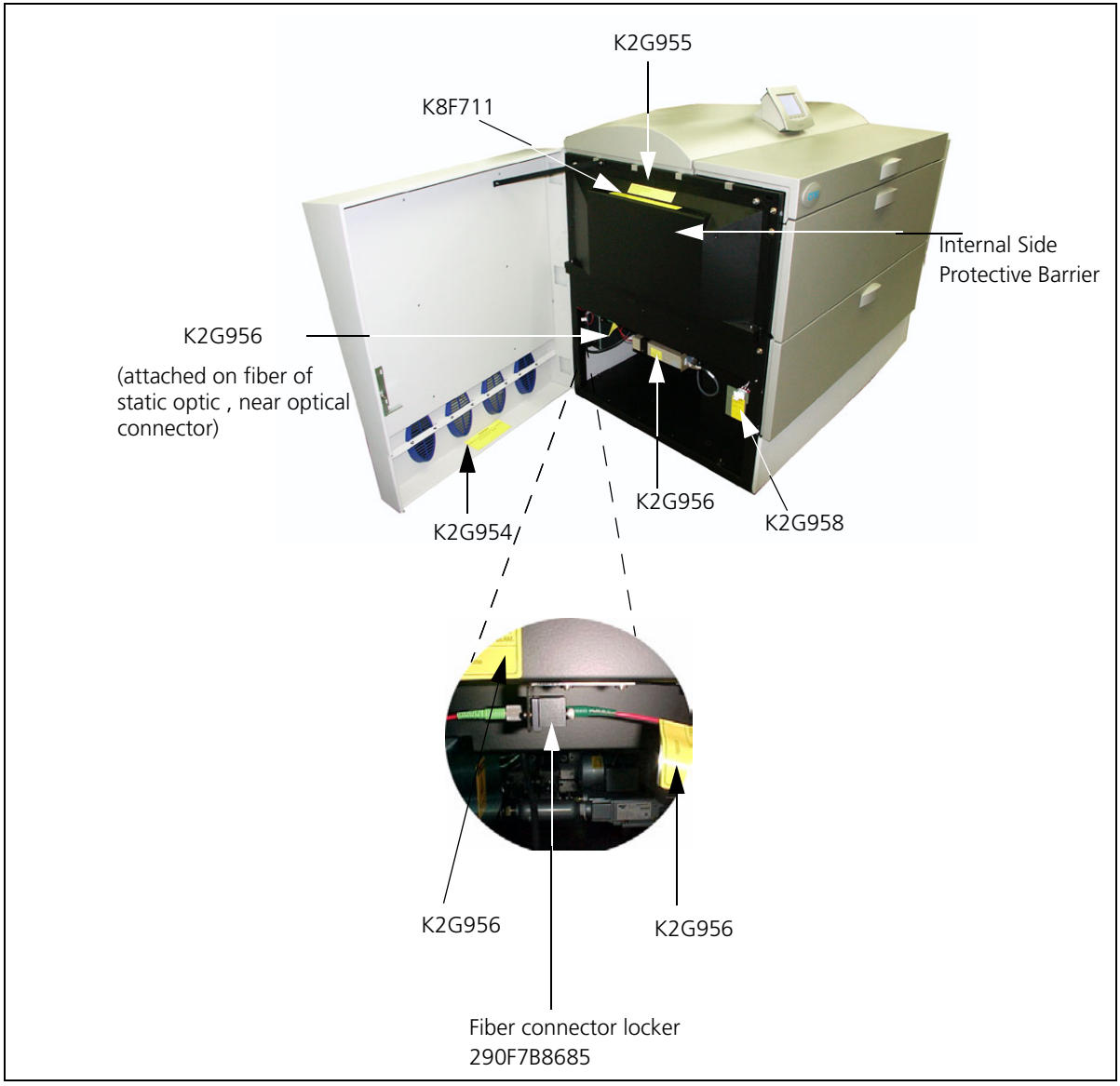


Figure 2: Dolev 800V^3 - left side door open

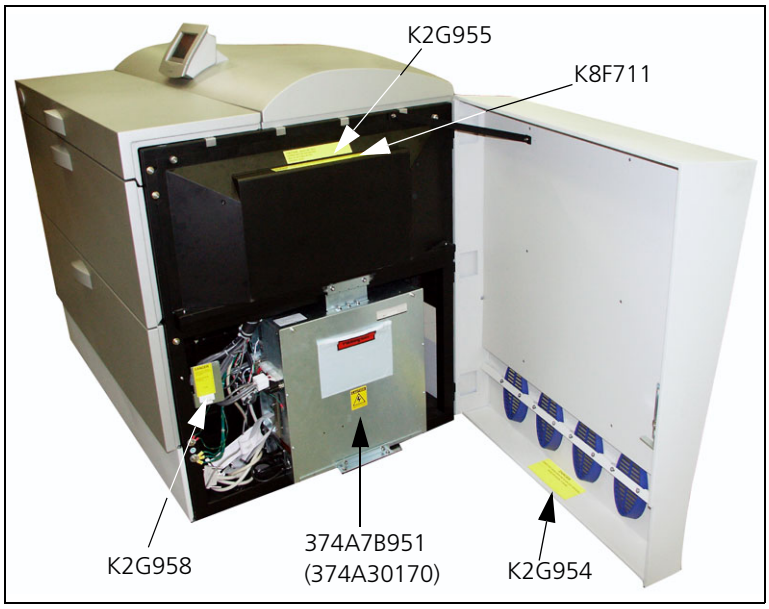


Figure 3: Right side door open

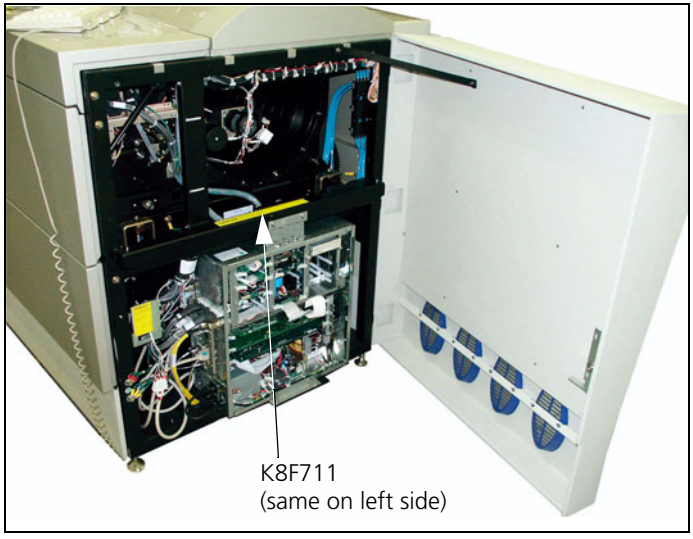


Figure 4: Right side, internal protective barrier removed



Figure 5: Rear view

2

General Description

About this chapter:

This manual is designed to help you install the imagesetter. Read this material to understand the general structure of the imagesetter.

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Specifications 21
Imagesetter Installation Checklist 28



2.1 Imagesetter Features

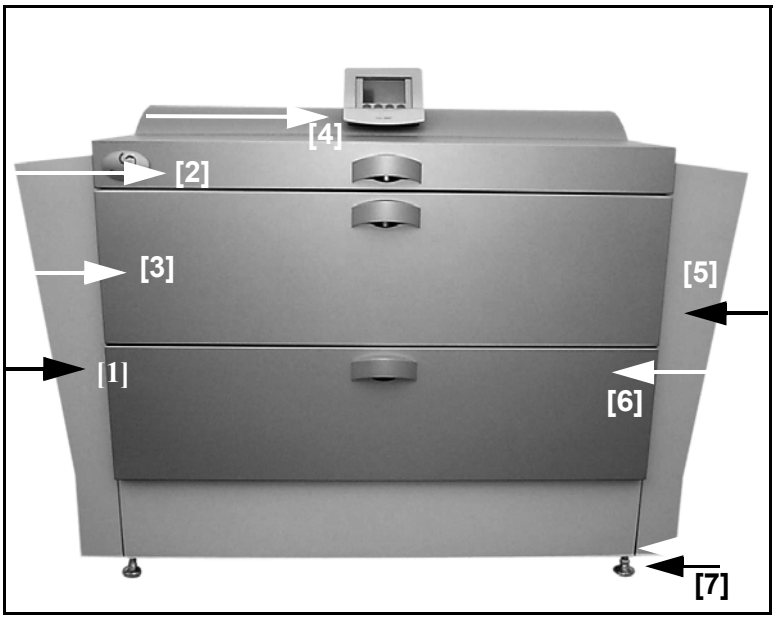


Figure 6: Dolev 800V+/800V^2/800V^3 Front View

Left service door [1]:

This door allows access to the Drum area. You may open this door to clear media stuck in the drum area. Service engineers access the electronics and optomechanics via the service doors.

Supply cassette compartment door [2]:

The small (#3) and medium (#2) supply cassettes are loaded via this door.

Large cassette door [3]:

The large supply cassette is loaded via this outer door.

Note: Another inner door is located behind this outer door.

Large supply cassette (#1):

This is a 34 inch wide cassette suitable for film widths from 10 inch to 34 inch in one inch step intervals.

Control Panel [4]:

Film loading and most basic operations are performed via the Control Panel. In addition, a Reset switch **[a]** is recessed behind the bezel at the top of the Control Panel. An **On/Off [b]** switch is also located next to the Reset switch. The imagesetter is turned **on/off** using this switch.

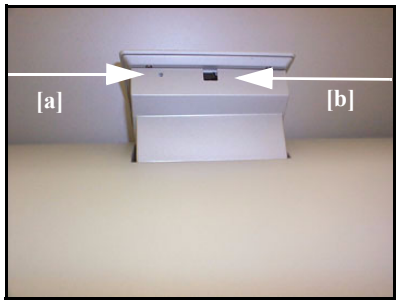


Figure 7: Rest and On/Off Switches

Right service door [5]:

This door allows access to the Drum area. You may open this door to clear media stuck in the drum area. Service engineers access the electronics and optomechanics via the service doors.

Output cassette door [6]:

The output cassette is located behind this door. Exposure media can be output either to the output cassette or to an in-line processor.

Adjustment legs [7]:

Four (4) adjustment legs are used to level the imagesetter. Before moving the unit, unlock the legs.

Wheels:

Four (4) wheels allow easy positioning of the imagesetter. Once the machine is in place, the adjustment legs are locked into position and the wheels are ineffective.

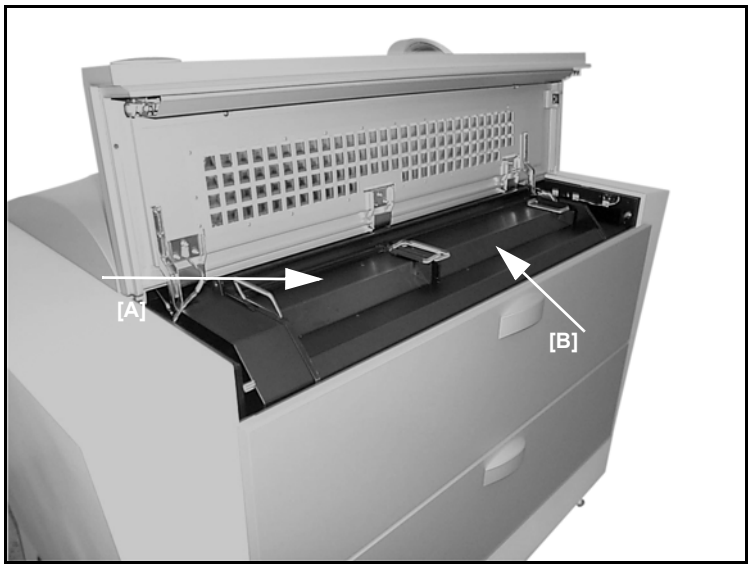


Figure 8: Dolev 800V+/800V^2/800V^3 Small and Medium Cassettes

Small Supply Cassette (#3) [A]:

This is a 12 inch wide cassette for film widths 10 , 11 and 12 inches.

Medium Supply Cassette (#2) [B]:

This is a 20 inch wide cassette suitable for film widths from 10 to 20 inches in one inch step intervals.

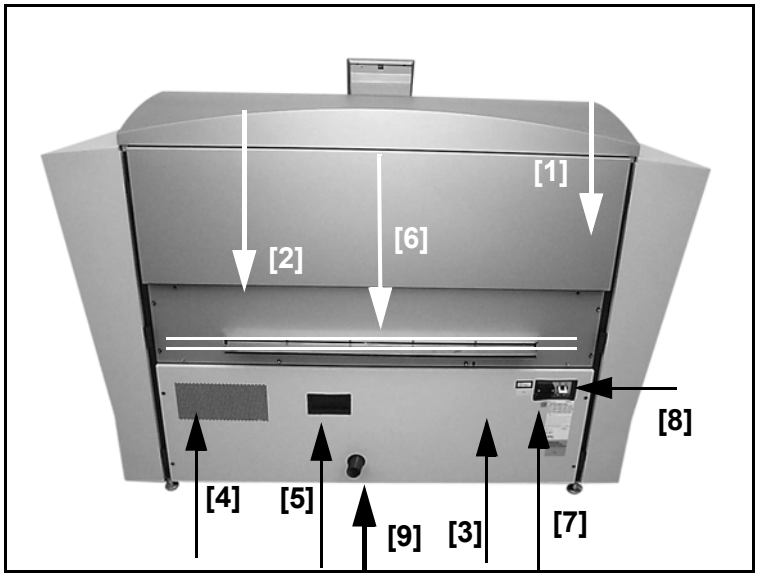


Figure 9: Dolev 800V+/800V^2/800V^3 Back View

Upper Service panel [1]:

The panel is not removed.

In-line processor panel [2] (not shown:

Remove this panel when you connect to the in-line processor.

Lower Service panel [3]:

Use the panel to access the power distribution unit, and the vacuum system.

Fan [4]:

The fan does not require maintenance. It does require that the imagesetter be kept at least 70 cm. from the wall.

Punch system (optional) pressure inlet [5].

Connection to in-line processor [6]:

The in-line processor is an option for the Dolev 800V+/800V^2/800V^3.

Power inlet [7]:

The power cord is connected here.

Master circuit breaker [8]:

If a power surge or some other electrical problem has shorted power to the imagesetter, check the breaker.

Vacuum Pump Outlet [9]:

Outlet for vacuum pump.

Turbo Screening Connection:

The Turbo Screening board is connected via a host cable 30 meters long:
For Dolev 800V+/800V^2 - between the E-Box (SOMC) and the TSP inside the Brisque.

For Dolev 800V^3 - between the E-box (MB-SOMC) and TSP 100 inside the Brisque.



For further information about TurboScreening see the *TSP Board Installation Guide*.

2.2 Specifications

Table 1: Technology

	Dolev 800V+	**Dolev 800V^2**	**Dolev 800V^3**
Structure	Large-format, Internal Drum	Large-format, Internal Drum	Large-format, Internal Drum
Light Source	Laser Diode 650 nm wavelength Light Power 5 milliwatts	Laser Diode 650 nm wavelength Light Power 5 milliwatts	Laser Diode 650 nm wavelength Light Power 5 milliwatts
Spot Size	variable, 10-25 microns	variable, 10-25 microns	variable, 10-25 microns
Repeatability	±5µm over the full format of successively imaged films, disregarding any distortion caused by temperature, humidity and film material.	±5µm over the full format of successively imaged films, disregarding any distortion caused by temperature, humidity and film material.	±5µm over the full format of successively imaged films, disregarding any distortion caused by temperature, humidity and film material.
Spinner	Air bearing up to 24,000 rpm	Air bearing up to 45,000 rpm	Air bearing up to 45,000 rpm
Raw Imaging Speed @100 lpmm/ 2540 dpi @ 80 lpmm/ 2032 dpi @ 50 lpmm/ 1270 dpi	 37.27 cm^2/second (346 in^2/min) 89.3 cm^2/second (831 in^2/min)	 60.7 cm^2/second (564 in^2/min) 94.9 cm^2/second (882 in^2/min)	 4995 / 774 6283 / 974 10053 / 1558
Throughput	(full formats per hour)	(full formats per hour)	(full formats per hour)
@100 lpmm/ 2540 dpi	10 full formats/hr (80 A4 pages/hr)	16.2 full formats/hr (130 A4 pages/hr)	23 full formats/hr
@ 80 lpmm/ 2032 dpi	12 full formats/hr (96 A4 pages/hr)	21.4 full formats/hr (171 A4 pages/hr)	27 full formats/hr

Table 1: Technology

	Dolev 800V+	Dolev 800V[2]	Dolev 800V[3]
@ 50 lpmm/ 1270 dpi	17 full formats/hr (136 A4 pages/hr)	28.6 full formats/hr (229 A4 pages/hr)	36 full formats/hr
Brisque	TSP / VLSI	TSP	TSP 100

Table 2: Image Features

	Dolev 800V+	Dolev 800V2	Dolev 800V3
Maximum Net Image Area	838 x 1117 mm (33 x 44 in)	838 x 1117 mm (33 x 44 in)	838 x 1117 mm (33 x 44 in)
Page Formats Capability	Up to 8*A4, 4*A3, 2*A2, 8*B4, 4*B3, 2*B2, 1*B1	Up to 8*A4, 4*A3, 2*A2, 8*B4, 4*B3, 2*B2, 1*B1	Up to 8*A4, 4*A3, 2*A2, 8*B4, 4*B3, 2*B2, 1*B1
Press Formats Capability	Heidelberg GTO, SM52, SM74, SM102 MAN Roland 100, 200. 600 Komori 26, 28, 44	Heidelberg GTO, SM52, SM74, SM102 MAN Roland 100, 200. 600 Komori 26, 28, 44	Heidelberg GTO, SM52, SM74, SM102 MAN Roland 100, 200. 600 Komori 26, 28, 44
Resolution	50-200 pixels/mm, 1270-5080 dpi; continuously variable. Optional lower and higher resolutions	50-200 lpm, 1270-5080 dpi; continuously variable. Up to 400 lpm (10,000 dpi) for security printing models (UHR)	50-200 lpm, 1270-5080 dpi; continuously variable. Up to 400 lpm (10,000 dpi) for security printing models (UHR)
Screen Technology	Creo TurboScreening including conventional dot shapes: round, square, diamond, gravure. Creo composite, GeometricDOT and FM.	Creo TurboScreening including conventional dot shapes: round, square, diamond, gravure. Creo composite, GeometricDOT and FM.	Creo TurboScreening including conventional dot shapes: round, square, diamond, gravure. Creo composite, GeometricDOT and FM.

Table 2: Image Features

	Dolev 800V+	Dolev 800V[2]	Dolev 800V[3]
Screen Ruling	(frequency) 20-246 lpcm / 50-625 lpi	(frequency) 20-246 lpcm / 50-625 lpi	(frequency) 20-246 lpcm / 50-625 lpi
Screen Angles	User-selectable from a variety of preset angles.	User-selectable from a variety of preset angles.	User-selectable from a variety of preset angles.

Table 3: Media and Related Features

	Dolev 800V+	Dolev 800V2	Dolev 800V3
Types of Media	Roll, medium to high contrast, red sensitive, film or polyester plates	Roll, medium to high contrast, red sensitive, film or polyester plates	Roll, medium to high contrast, red sensitive, film or polyester plates
Media Width	254-863 mm in steps of 25.4 mm 10–34 in. in steps of 1 in	254-863 mm in steps of 25.4mm 10–34 in. in steps of 1 in	254-863 mm in steps of 25.4 mm 10–34 in. in steps of 1 in
Media Length (inside Drum)	Min. 420 mm (15 in); Max. 1200 mm (47 in)	Min. 450 mm (16 in); Max. 1200 mm (47 in)	Min. 450 mm (16 in); Max. 1200 mm (47 in)
Thickness and Capacity	60 m/200 ft at 0.1 mm/4 mil 30 m/100 ft at 0.2 mm/8 mil	60 m/200 ft at 0.1 mm/4 mil 30 m/100 ft at 0.2 mm/8 mil	60 m/200 ft at 0.1 mm/4 mil 30 m/100 ft at 0.2 mm/8 mil

Table 3: Media and Related Features

	Dolev 800V+	Dolev 800V2	Dolev 800V3
Loading Cassette	Three different size cassettes for rolls, including daylight film. Sizes up to: 304, 508, 863 mm (12, 20, 34 in) or Two optional large (863 mm/34 in) cassettes instead of three cassettes.	Three different size cassettes for rolls, including daylight film. Sizes up to: 304, 508, 863 mm (12, 20, 34 in) or Two optional large (863 mm/34 in) cassettes instead of three cassettes.	Three different size cassettes for rolls, including daylight film. Sizes up to: 304, 508, 863 mm (12, 20, 34 in) or Two optional large (863 mm/34 in) cassettes instead of three cassettes.
Unloading Cassette	One, accumulating cut sheet type, 12 sheets capacity for 0.1 mm/4-mil film.	One, accumulating cut sheet type, 12 sheets capacity for 0.1 mm/4-mil film.	One, accumulating cut sheet type, 12 sheets capacity for 0.1 mm/4-mil film.
Inline Processor	Optional (refer to recommended list)	Optional (refer to recommended list)	Optional (refer to recommended list)
Punch System	Customized head punch up to 10 holes. Optional, Bacher and Stasser standard.	Customized head punch up to 10 holes. Optional, Bacher and Stasser standard.	Customized head punch up to 10 holes. Optional, Bacher and Stasser standard.

Table 4: Environment

	Dolev 800V+	Dolev 800V2	Dolev 800V3
Electrical Requirements	200/220/240 VAC, ± 10% Europe: Single Phase, 50/60 Hz ± 2 Hz USA/Japan: 2 Phase 50/60 Hz ± 2 Hz **Power** Less than 3 KVA	200/220/240 VAC, ± 10% Europe: Single Phase, 50/60 Hz ± 2 Hz USA/Japan: 2 Phase 50/60 Hz ± 2 Hz **Power** Less than 3 KVA	200/220/240 VAC, ± 10% Europe: Single Phase, 50/60 Hz ± 2 Hz USA/Japan: 2 Phase 50/60 Hz± 2 Hz **Power** Less than 3 KVA
Operating Environment Temperature: Relative Humidity: Audible Noise: Heat Dissipatoin:	23°C ± 3°C 73.4°F ± 5.4°F 55% ± 5% RH <55dbA 2500 BTU/hr	23°C ± 3°C 73.4°F ± 5.4°F 55% ± 5% RH <55dbA 2500 BTU/hr	23°C ± 3°C 73.4°F ± 5.4°F 55% ± 5% RH <55dbA 2500 BTU/hr
Area Requirements	6.7 square meters	6.7 square meters	6.7 square meters

Table 5: Physical Dimensions

	Dolev 800V+	Dolev 800V2	Dolev 800V3
Dimensions	Height: 1230 mm (48 in) Width: 1650 mm (65 in) Depth: 1000 mm (39 in)	Height: 1230 mm (48 in) Width: 1650 mm (65 in) Depth: 1000 mm (39 in)	Height: 1230 mm (48 in) Width: 1650 mm (65 in) Depth: 1000 mm (39 in)
Weight	550 kg (1210 lb)	550 kg (1210 lb)	550 kg (1210 lb)

Table 6: RIP

	Dolev 800V+	**Dolev 800V2**	**Dolev 800V3**
Brisque	**Processor:** Power PC 604 **Type:** Software **Operating System:** AIX **Architecture:** CPSI with composite workflow and TurboScreening **CPU Speed:** 332 MHz and up **Interpreter:** Postscript Levels 2 and 3 **DataFormats:** PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), (N)LW, CT, ICF (Imposition Control File), Brisque Page. **Communication Formats:** Built-in Helios EtherShare, NFS, TCP/IP.	**Processor:** Power PC 604 **Type:** Software **Operating System:** AIX **Architecture:** CPSI with composite workflow and TurboScreening **CPU Speed:** 332 MHz and up **Interpreter:** Postscript Levels 2 and 3 **DataFormats:** PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), (N)LW, CT, ICF (Imposition Control File), Brisque Page. **Communication Formats:** Built-in Helios EtherShare, NFS, TCP/IP.	**Dual Processor:** Power PC 604 **Type:** Software **Operating System:** AIX **Architecture:** CPSI with composite workflow and TurboScreening **CPU Speed:** 332 MHz and up **Interpreter:** Postscript Levels 2 and 3 **DataFormats:** PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), (N)LW, CT, ICF (Imposition Control File), Brisque Page. **Communication Formats:** Built-in Helios EtherShare, NFS, TCP/IP.

Table 6: RIP

	Dolev 800V+	Dolev 800V[2]	Dolev 800V[3]
PS/M	**Macintosh platform**: Power Macintosh 604, 604e with Apple OS 6 or 7.5.3 or higher **RIP**: Software type, Adobe CPSI with composite workflow and TurboScreening **Data Formats:** PDF, Postscript, EPS, DCS1, DCS2, TIFF/ IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File). **Communication Formats:** Appletalk, TCP/IP.	**Macintosh platform**: Power Macintosh 604, 604e with Apple OS 6 or 7.5.3 or higher **RIP**: Software type, Adobe CPSI with composite workflow and TurboScreening **Data Formats:** PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File). **Communication Formats:** Appletalk, TCP/IP.	**Macintosh platform**: Power Macintosh 604, 604e with Apple OS 7.5.3 or higher **RIP**: Software type, Adobe CPSI with composite workflow and TurboScreening **Data Formats:** PDF, Postscript, EPS, DCS1, DCS2, TIFF/ IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File). **Communication Formats:** Appletalk, TCP/IP.
Prinergy		CS Xpose with **DataFormats:** PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File). or Direct connectivity through 1-bit tiff	CS Xpose with **DataFormats:** PDF, Postscript, EPS, DCS1, DCS2, TIFF/ IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File). or Direct connectivity through 1-bit tiff

Table 7: Specification Performance

Class 1 Laser Product according to IEC Standard 825-1

2.3 Imagesetter Installation Checklist

Use the following checklist to plan and track the Imagesetter installation:

No.	Installation Item	Complete
1.	**Site Preparation** (refer the site preparation checklist)	
2.	**Hardware Installation**	
3.	Check for Damage	
4.	Remove the Imagesetter	
5.	Open Imagesetter Doors	
6.	Level the Imagesetter	
7.	Fit the Inline Processor (Optional)	
8.	Check correct model for Dolev 800V+/800V^2/800V^3	
9.	Remove Shipping Safeguards	
10.	Select Film Path	
11.	Electrical Connection	
12.	Power On	
13.	Software Version Check	
14.	**Start Operation**	
15.	Insert the Interlock Keys	
16.	Load the Film Cassettes	
17.	Update Media Information	
18.	Imagesetter Check	
19.	Empty Imagesetter Drum	
20.	Remove Interlock Keys	
21.	Restart the Imagesetter	
22.	Close Imagesetter Doors	
23.	Load New Film into Drum	

No.	Installation Item	Complete
24.	Perform Regular Unload	
25.	Process Film	
26.	**System Configuration**	
27.	Host Installation	
28.	TSP 100 Boards Installation	
29.	Host Connection	
30.	Configuration on the Host	
31.	Test Exposure from the Host	
32.	**Film Calibration**	
33.	Check Laser Intensity	
34.	Examine and Set Laser Intensity	
35.	Expose Uni-Max Adjust Width and Height Offsets	
36.	Examine Overall Film Quality	
37.	Run Excurve	
38.	**Customer Training**	

3

Site Preparation

About this chapter:

This chapter describes how to prepare the customer site for Dolev 800V+/800V^2/800V^3 Imagesetter and installation.

Before installing the Imagesetter:

Read this chapter thoroughly before attempting to install the Imagesetter. It will help to prevent unnecessary problems and delays.

Site Preparation Checklist.....32

Space Requirements.....33

Electrical Requirements 34

Environmental Requirements.....38



3.1 Site Preparation Checklist

Before arrival of the imagesetter at the installation site, you should prepare a final layout of the site, and determine that all requirements will be met. Work together with the customer to ensure that you have all pertinent details: floor space, electrical wiring, air conditioning, work area illumination, inline processor specifications, and telephone hookups.

No.	Requirement Item	Met ?
1.	Electrical	
2.	Circuit breakers and sockets	
3.	Grounding network	
4.	Air-conditioning power	
5.	Space	
6.	Cable routing provisions	
7.	Communication network	
8.	Water supply	
9.	Illumination	
10.	Fume exhaust system	
11.	Delivery route: doors, corridors, elevators	
12.	Protection from direct sunlight	
13.	Anti-static flooring	
14.	Thermometers and humidity meters/ recorders	
15.	Storage space	
16.	Access to and operation of the system	
17.	Inline processor (according to correct serial number)	
18.	Phone lines (two outlets)	
19.	Preparation of technical drawings	
20.	Preparation of electrical wiring	
21.	Preparation of air-conditioning plans	

No.	Requirement Item	Met ?
22.	Air pressure	
23.	Fire detection and prevention	



For additional guidance on site preparations for the Dolev 800V+/800V^2/800V^3, refer to the **Site Preparation on Tech Planet.**

3.2 Space Requirements

3.2.1 Floor Space

Before you unpack and install the Dolev 800V+/800V^2/800V^3 make sure the unpacking site is large enough to allow easy lifting and maneuvering of the imagesetter. See the figure below for the Dolev 800V+/800V^2/800V^3 outline dimensions. The measurements in the drawing are in millimeters and (inches).



Note: If the packing materials are intended for re-use, be careful not to damage them when unpacking.

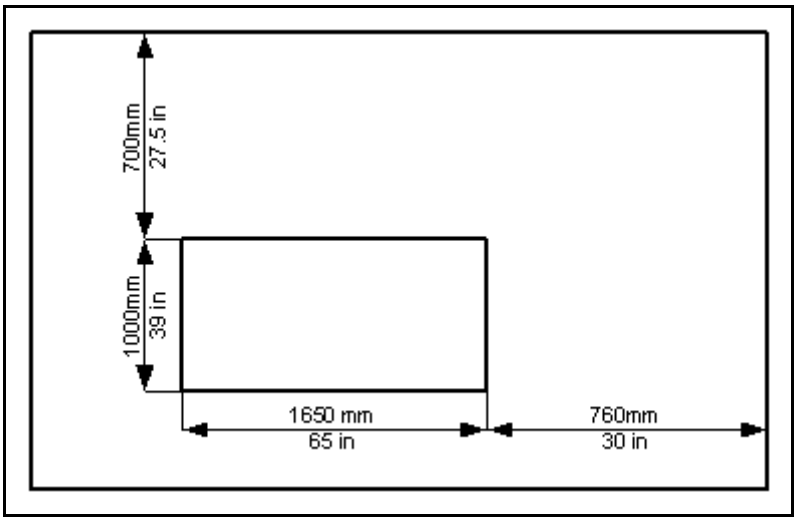


Figure 10: Dolev 800V+/800V^2/800V^3 Outline Dimensions

3.2.2 Imagesetter Weight

The imagesetter weighs between 550 and 600 kilograms and rests on four (4) symmetrically-placed cushioned legs. Most standard industrial floors are strong enough to support the imagesetter, though actual room dimensions and additional equipment at the site should be considered.

3.3 Electrical Requirements

3.3.1 General Considerations

The total power consumed by your system is determined by the system configuration selected. Remember to allow sufficient margin for system expansion when calculating the required electrical capacity.

3.3.2 Supply Voltage

Each separate piece of equipment is individually powered from source, allowing maximum permutation of layout, and reduced dependency during operation. Provision of sufficient power sockets must therefore be taken into consideration.

All equipment operates from standard mains supply sockets. The imagesetter is switch-selectable to comply with a wide range of voltage applications.

Voltage variations of up to ± 10% on all selectable voltages are acceptable. Supply frequency variations of ± 2 Hz are similarly acceptable.

The main circuit breaker should be a shunt trip breaker, which trips on loss of voltage. A single phase isolated outlet is required for the imagesetter.

Note the following guidelines:

- The input power cable (from the building input feeder/main power entrance to the system branch circuit power panel) should be a dedicated line, 5-wire protected cable, not longer than 30 m (100 ft).
- Output circuit breakers should be used for every branch circuit (outlet). Each circuit breaker should be labeled, identifying its load relationship, and correspondence to outlet.
- Additional isolated single phase outlets are required for service purposes.
- Special codes and regulations may exist covering the installation of electrical facilities in general, and in computer sites in particular. Ensure that site construction complies with these local codes before the system is delivered.

Power Line Disturbances

The reliable operation of computer systems depends on the availability of relatively noise-free AC power.

Lighting, line faults, or the power switching, commonly found in machinery or equipment in office or factory environments, can generate line transients which far exceed the peak value of the applied voltage. If not attenuated, these micro-second pulses can disrupt system operation.

Note the following guidelines:

- Limited power supply attenuation has been incorporated into your equipment to minimize the possible effects of disruptive factors (such as transient and instantaneous power interruptions).
- Since these conditions are unique to your particular site, we recommend additional protection, including provision of a mains input circuit breaker with shunt trip, and an isolation transformer with common mode noise attenuation of more than 120 dB.
- All other potential noise-generating equipment (such as, fans, fluorescent lighting and air-conditioning system) must be separated from the power source used for the system.

Grounding

The power ground system for 50 Hz sites should include the 220 VAC and 380 VAC grounds, tied back to the main power ground point of the building, by means of a 40 mm solid copper wire (7 mm in diameter).

At 60 Hz sites, 220 VAC, 110 VAC, and 208 VAC grounds tied by AWG #1 solid copper wire are required.

Grounding requirements for the imagesetter - and all equipment communicating with it - should be observed to ensure trouble-free operation.

Grounding requires the following:

- Grounding wires that are insulated and at least equal in size to the phase conductors.
- Ground impedance less than 2 ohms.
- A single point and dedicated ground.
- Power stabilizer equipment that is supplied by three (3) uninterrupted phase wires, and one uninterrupted copper ground wire, from the main building entry service panel. These should run in the same conduit and be at least equal in size to the phase wires.
- Neutral and ground are bonded together in the main building entry service panel, and a good earth ground at this point of not more than 2 Ohms impedance.
- Each system load (Imagesetter, Host, etc.) is fed through an isolated ground outlet and has a separate ground, as well as neutral and phase line of equal size wire.



Note: Chained neutrals or grounds are not permissible.

- All ground wires from isolated ground outlets are kept isolated from building ground and terminated **only** at the ground bus of the power stabilizer.
- Other equipment, not on the power stabilizer but communicating with the imagesetter, must have a reference ground wire installed between the power stabilizer ground bus and that piece of equipment.
- These instructions **do not** replace any enforced government or local standards. The installer should check the applicable electrical code and assure full compliance.

3.3.3 Cables

If cables must be routed through a wall, the holes in the wall should be as follows:



Note: No electrical wiring (stabilized or unstabilized) may run in the data cable conduit.

- Round holes should be 10 cm (4 inches) in diameter.
- Square holes should be 8.9 cm (3.5 inches) in diameter.

3.4 Environmental Requirements

3.4.1 Cleanliness

The cleanliness of standard laser operating environment, (up to 0.168 milligram/M Class 4, B.S. 5295) should be as follows:

- Up to 200,000 particles/M^3 when greater than 5 microns.
- Up to 40,000 particles/M^3 when greater than 10 microns.
- Up to 4,000 particles/M^3 when greater than 25 microns.

Filters in the air conditioning system will be able to block 60% of all 10 micron dust particles.

3.4.2 Static Electricity

Use of floor carpeting is **not** recommended in the imagesetter area. If carpets are used, only anti-static carpets should be installed at the site. Their size should be at least 2.5 m (8 ft) in all directions of the operator's access.

Air Conditioning

Sufficient air-conditioning should be present to provide heat dissipation for the imagesetter (2500 BTU per hour) **plus** all additional equipment residing in the System room **plus** a minimum 25% safety margin.

Example (all in BTU/hour):

Imagesetter:	2500
Host:	2500
Light Table:	1500
Other Misc:	1500
Safety Margin: (25% of above)	2000
Total Heat:	10000

- The imagesetter requires a constant air temperature of 23°C ± 3°C and relative air humidity of 55% ± 5%.
- The maximum temperature variation is 5°C per hour.
- The minimum allowed temperature is 10°C.

Note the following guidelines:

- It is recommended that the air flow in the System room be maintained above normal air pressure, in order to prevent dust from entering the room.
- The System room should ideally contain both a thermometer and hygrometer, permanently mounted in a central location.

3.5 Film Specifications

The standard film will be orthochromatic (red sensitive), requiring a bright cyan safety light. (For more details, refer to the film manufacturer's recommendations.)

Although the film must be loaded into its cassette in a suitable darkroom, following this initial step, routine film handling can be performed under normal daylight conditions. Direct sunlight should always be avoided.



For further details see *Film Specifications* on page 95.

4 Hardware Installation

About this chapter:

This chapter describes the physical installation of the Dolev 800V+/800V^2/800V^3 Imagesetter and the steps which are required to make the imagesetter ready for operation:

Unpacking 42

Opening Imagesetter Doors 45

Leveling the Imagesetter 46

Removing Shipping Safeguards 47

Film Path Selector Position 49

Electrical Connection 50



4.1 Unpacking

Note: Handle all packing materials with care. These materials will be used again if you need to transport the imagesetter in the future.

The Dolev 800V+/800V^2/800V^3 packing and unpacking drawing is shown below (*Figure 11 Unpacking the Imagesetter*). Refer to it for the parts mentioned in the instructions.

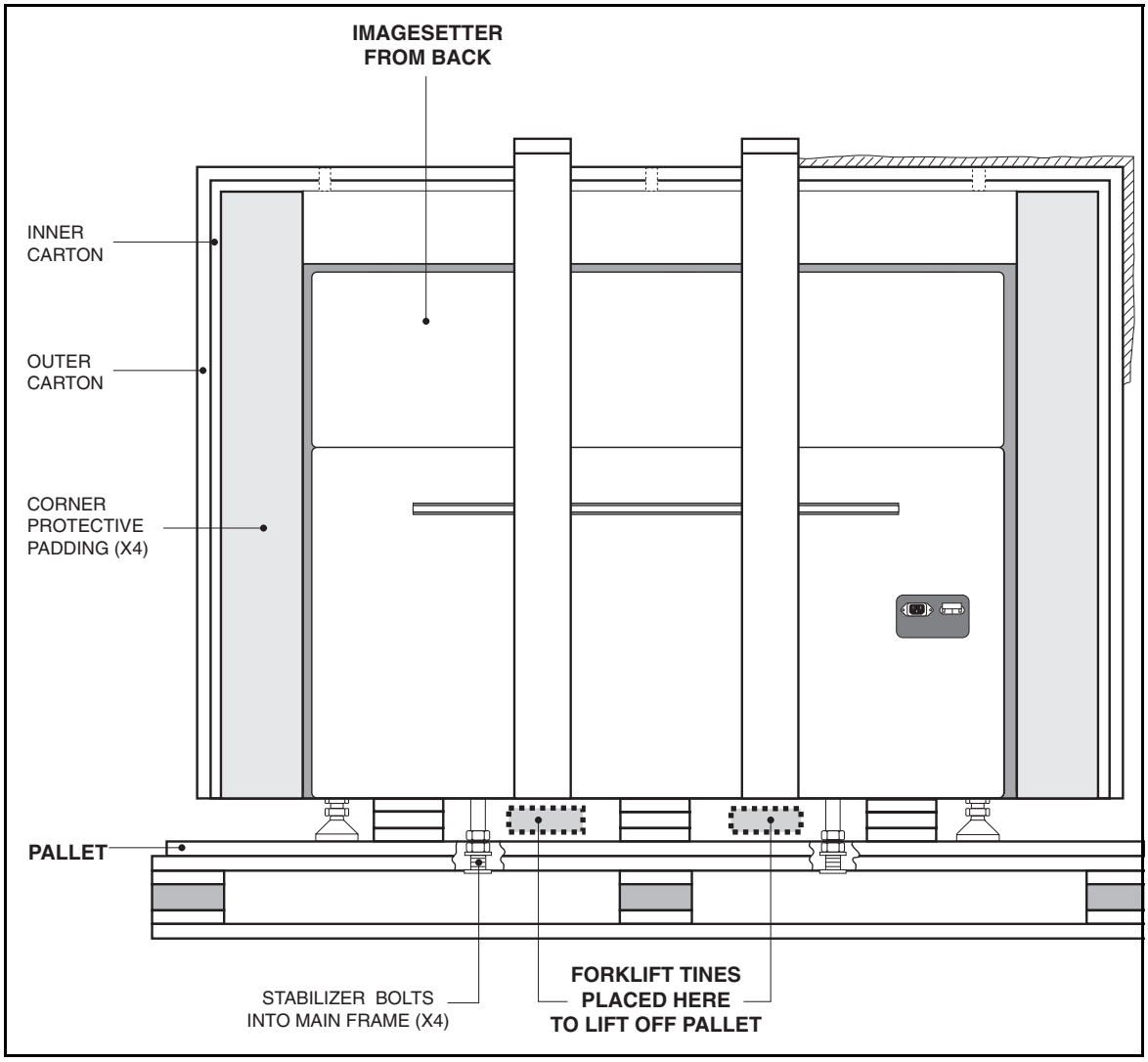


Figure 11: Unpacking the Imagesetter

Checking for Damage

Check that the shipping container is undamaged. **Do not proceed with the installation if it is damaged in any way and notify the shipping agent immediately.**

If the shock indicator is missing, or indicates that the imagesetter has experienced an excessively large shock, **do not proceed with the installation and notify the shipping agent immediately.**

4.1.1 Precautions

Observe the following precautions before unpacking:

- Do not unpack the Dolev 800V+/800V^2/800V^3 in extreme heat or cold (above 30°C or below 0°C).
- Do not unpack the imagesetter if there is any sign of damage to the packaging. Call the shipping agent.
- Do not unpack the Dolev 800V+/800V^2/800V^3 in a non-air conditioned warehouse in very humid weather.
- At temperatures under -10° C the Dolev 800V+/800V^2/800V^3 package should be transported in a closed truck under controlled temperature.
- If there are signs of ice on the machine, such as fog on the prism, do not touch any of the mechanical parts. Wait 24 hours (preferably 48 hours) for the Dolev 800V+/800V^2/800V^3 to gradually reach room temperature.

4.1.2 Removing the Imagesetter



Note: A minimum of **three (3)** technicians is required to lower the imagesetter from its pallet.

1. Remove the plastic wrap surrounding the imagesetter by cutting the three bands surrounding the shipment.
2. Open the carton cover flaps.

3. Take out the staples that connect the outer carton to the pallet and Remove the outer carton.
4. Remove the inner carton (sleeve) surrounding the imagesetter.
5. Remove the corner protective padding.
6. Remove the left and right service doors. The doors are screwed shut from the inside of the main frame. To open the service doors, open the unloading door and remove the output cassette.
   For each door, locate the Allen locking screw, approximately 10 cm from the bottom of the main frame. Release the screw. Open each door and lift each door off of the frame and put it in a safe place.
7. Locate and remove the four bolts (including washers, springs, and nuts) that secure the imagesetter to the pallet.

4.2 Opening Imagesetter Doors

From time to time there will be a need to access and open the imagesetter doors and covers. This is the recommended procedure, although sometimes it will not be necessary to follow **all** of the steps.

1. Open the Unloading Cassette Door by depressing the handle/button (A) (see *Figure 12 Opening the Unloading Cassette Door*).



Figure 12: Opening the Unloading Cassette Door

2. It is now possible to open the Side Service Doors (B), by unscrewing the two side door locking screws (C) (see *Figure 13 Opening the Side Service Doors*).

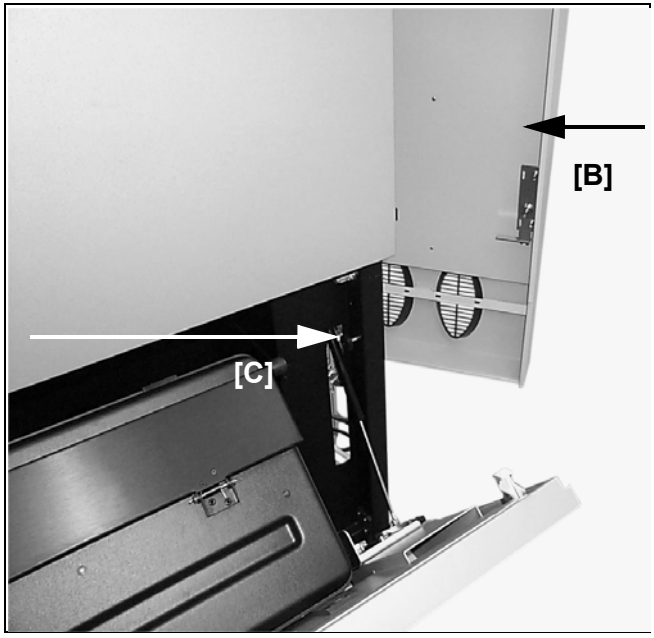


Figure 13: Opening the Side Service Doors

Note: The door structure may change in the future.

Leveling the Imagesetter

The imagesetter is at the proper position when all of its wheels are raised just above the floor. A standard leveling instrument should be used to ensure that the imagesetter is level.

In this instance, **level** means that the imagesetter is situated on a uniform horizontal plane at all four (4) corners.

1. **Raise** the four level adjustment mounts ("legs") **[1]** on the base of the main frame until they are retracted as much as possible. If you do not raise the mounts, they prevent the imagesetter from rolling smoothly off of the pallet.

WARNING: Exercise extreme caution when removing the machine from the pallet. The machine is heavy: in excess of 500 kg.

WARNING: One technician stands to the front left of the machine. A second technician stands to the front right of the machine. A third technician stands behind the machine.

2. **Lower** the machine very slowly from the pallet.
3. Once the imagesetter is at the installation site, roll the machine into final position.
4. Use the level adjustment mounts to fix the imagesetter in a level position. The mounts are similar to those found on home refrigerators. To set the mount, loosen the top hex lock nut. Next, turn the bottom hex nut to raise or lower the mount to the required height. When the adjustment is complete, tighten the top hex nut to lock the mount.

Note: It is best to adjust the height of each of the four mounts before you lock any of the mounts in place. Lock the mounts only when all four sides are set to the proper height.

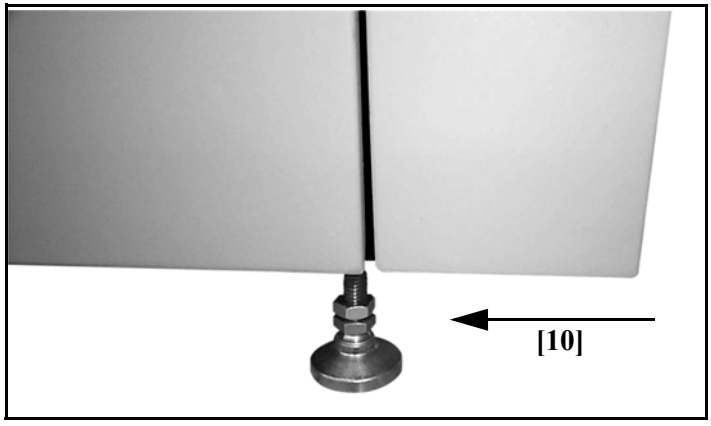


Figure 14: Imagesetter Level Adjustment

4.3 Removing Shipping Safeguards

The imagesetter is shipped with numerous safeguards that prevent excessive movement of internal parts during transport.

These safeguards must be removed prior to imagesetter operation. Detailed procedures for their removal follow.

1. Remove the black light-proof covers on the top left and right of each side of the machine.
2. Locate the four equipment mount bridge clamps on Figure 16, inside the machine. The equipment mounts are easily identified by their blue color. During shipping, a screw is installed through a metal bridge clamp and onto the drum frame. It distributes weight more efficiently for transport. You must remove the screw that places the weight of the drum on each bridge clamp.

CAUTION: DO NOT REMOVE THE SCREWS SECURING THE BRIDGE CLAMP TO THE BASE OF THE MACHINE!

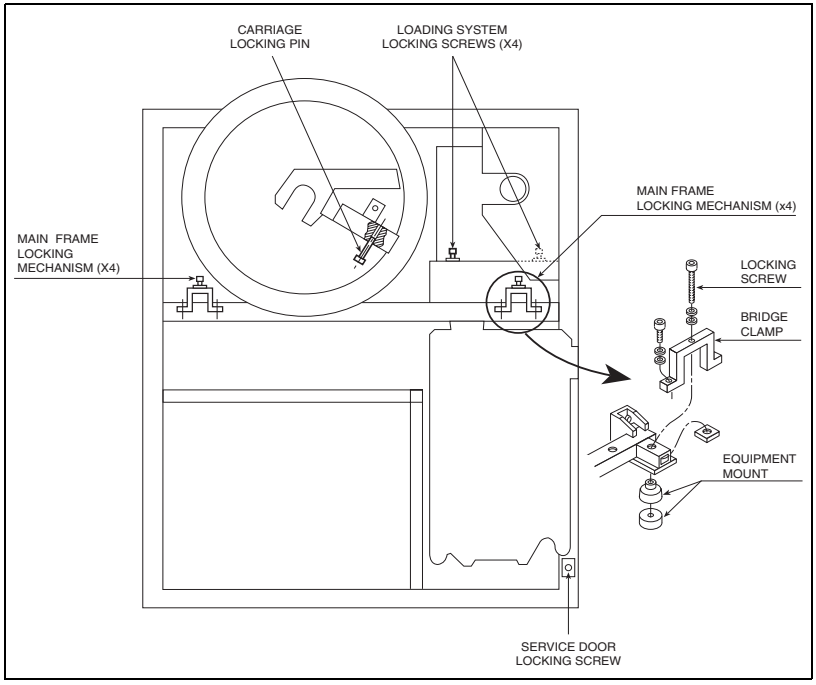


Figure 15: Loosening the Shipping Bridge Clamp Screw

3. Repeat the above step for all four equipment mount bridge clamps.
4. Locate the three (3) screws that secure the Loading/Unloading system during shipment. Remove the three screws.

5. Locate the optics carriage transport locking screw. The locking screw locks the carriage from underneath the carriage guide. The screw is insterted when the HP flag is aligned with the spreader ring. Remove the srew and place it inside the machine for future use.
6. Locate the red spreader locker on the right side of the drum. Remove the spreader locker and place it inside the machine for future use.
7. Put back the light-proof covers. Put back and close the left and right service doors. Put back the service covers at the rear of the imagesetter.



Note: Do not dispose of the pallet. Screw the bolts used to secure the imagesetter to the pallet back onto the pallet. Store the pallet in a safe place.

4.4 Film Path Selector Position

The Film Path Selector determines whether film is advanced to the Unloading Cassette or to the Inline Processor. The Film Path selector is located on both sides of the drum.

1. Open the Right Side Service door and remove the Light-proof cover.
2. Check that the Unloading Cassette/On Line Processor Selector [**C**] is in the Unloading Cassette Position or in the On line Processor position as shown in the label (see *Figure 16 Film Path Selector*).

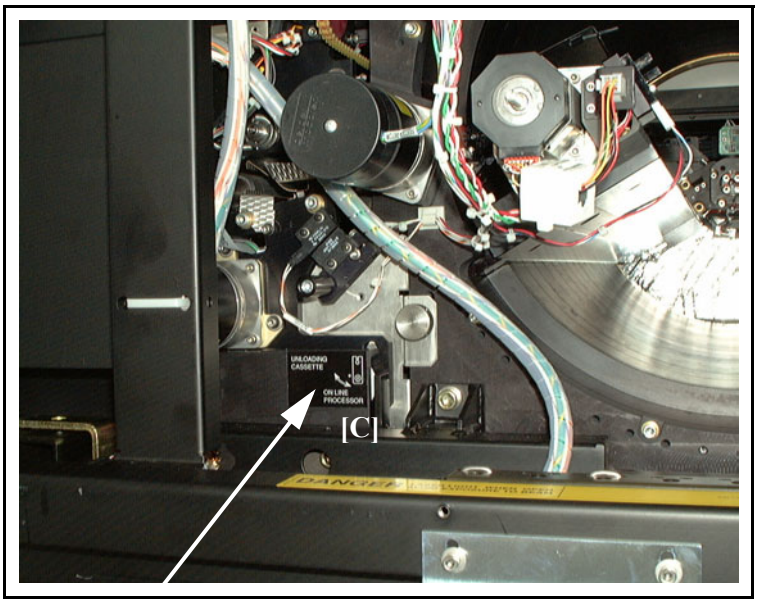


Figure 16: Film Path Selector

4.4.1 Developing Film (In-line Processor)

1. Align the imagesetter to the in-line processor with lips located on the back of the imagesetter.
2. Connect the communication cable between the processor and the imagesetter.
3. Change the selector postion to **in-line** mode.
4. Send a **setloading** from each cassette: **Small, Medium and Large.**
5. Verify **normal feed** via the in-line processor.

4.5 Electrical Connection

The next step is to check the local voltage setting and connect the electrical cables.

CAUTION: NO CONNECTIONS ARE TO BE MADE UNTIL VOLTAGE SETTING IS COMPLETE!

Before installation, match the line voltage with the voltage set for Dolev 800V+/800V^2/800V^3 which is sent from the factory oriented to 220 V. Perform the voltage setting below. Be sure that the **ON/OFF** switch on the Operation Panel and the Master circuit breaker switch at the rear of the imagesetter are both turned to the **OFF** position.

1. You must check the electrical voltage from the wall: measure the line voltage (DVM). If the line voltage matches the voltage set for Dolev 800V+/800V^2/800V^3 at the factory, you have completed the voltage check. Use the table below for reference:

Measured Voltage	Voltage Selector
211 V - 229 V	220 V*
190 V - 210 V	200 V
230 V - 250 V	240 V

* factory setting

If the line voltage does not measure in the range 211V - 229V, but is in the range 190V - 250V, proceed as follows:

2. Locate the standard controller on the lower right side of the imagesetter. Locate the Voltage Selector and set to the correct voltage: 200V or 240V. Select the voltage that is nearest to the measured voltage. Replace the cover on the Voltage Selector.



Figure 17: Voltage Setting on the Standard Controller

Connect the power cord to the Dolev 800V+/800V[2]/800V[3] and plug the cord into the electrical outlet.



Figure 18: Power Cord Inlet

4.5.1 Imagesetter Power On

Once you have ensured that all imagesetter boards and connections are in position and are correct, it is safe to power-on the imagesetter.

1. Ensure that the imagesetter is safely connected to the electrical supply.
2. Turn on the Main Power Breaker on the Electronic Power Drawer Assembly on the rear side of the imagesetter.
3. Turn on the **On/Off** Switch located on the left side of the imagesetter control panel.

5

Start Operation

About this chapter:

This chapter provides a step-by-step guide to beginning operations and media management on the imagesetter.

Start Operation Overview 56

The Supply Cassettes 58

Set Loading (Automatic Media Loading) 66

The Output Cassette 69

The Punch System 71



5.1 Start Operation Overview

The Dolev 800V+/800V^2/800V^3 imagesetter accepts film or polyester plates. The media is loaded onto a supply cassette and inserted into the imagesetter. You can select one of three supply cassettes: a **small** (12 inch), **medium** (20 inch) or **large** (34 inch) cassette.

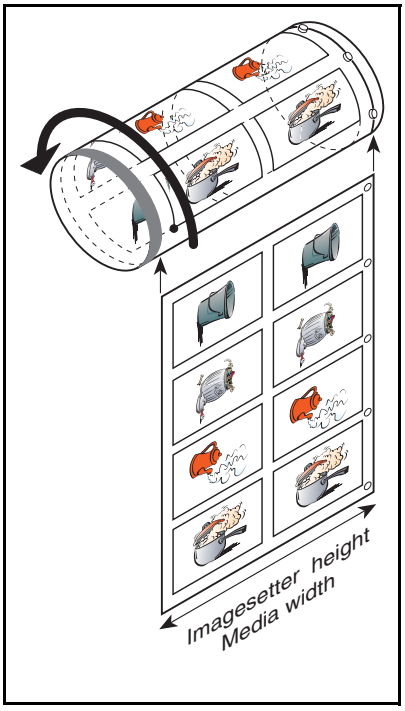


Figure 19: Dolev 800V+/800V^2/800V^3 Film

You access the media setup functions by moving through a tree-like series of menus on the host computer screen. All the functions can also be accessed through the imagesetter Control Panel.

The Dolev 800V+/800V^2/800V^3 has an automatic media setup mechanism. Once the supply cassette is inserted, performing the Set Loading procedure (via the Control Panel or the workstation) starts film loading.

The media is pulled between a set of rollers onto the exposure drum. The media is cut, and a vacuum system ensures that the media is held down on the inner drum surface.

During setup, the imagesetter cuts and ejects the first piece of media. This is done since a small piece of media was exposed to light when the cassette was carried from the darkroom.

The next step is to expose the media. You choose the file, the file resolution, and layout (these topics are covered in the user guide of the relevant host workstation).

The media is exposed and ejected. The ejected media is sent to the output cassette, or to an optional inline processor.

The following figure shows the media path in the imagesetter.

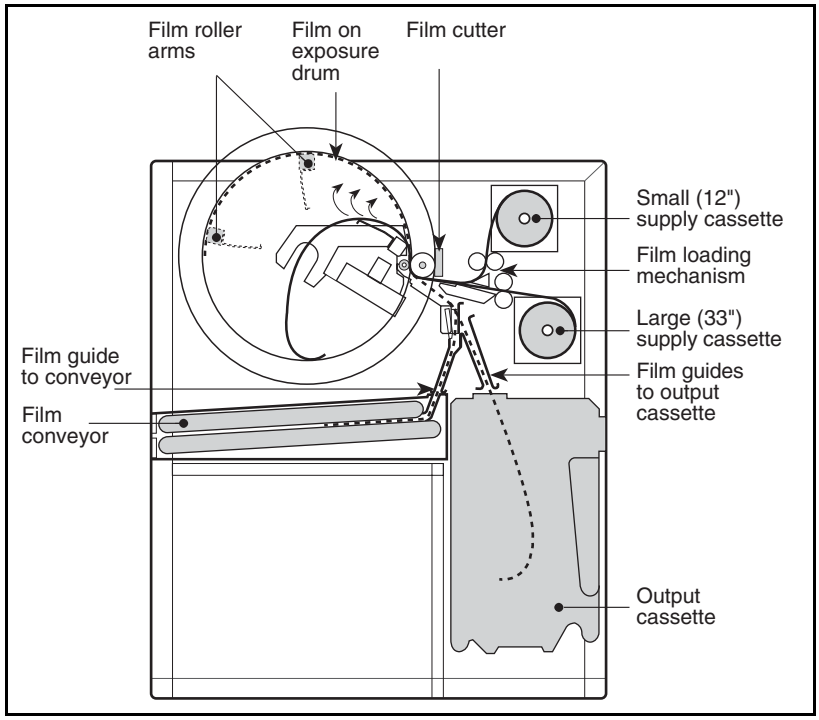


Figure 20: Dolev 800V+/800V^2/800V^3 media path (left-side view)

Note: Since the medium cassette is located to the right of the small cassette, it is **not** seen in the figure.

5.2 The Supply Cassettes

The three (3) Dolev 800V+/800V^2/800V^3 supply cassettes are used with medium to high contrast red sensitive lith or line film, paper, or polyester plates.

The steps you follow when loading new exposure media:

- Unloading the supply cassette and taking it to the darkroom.
- Mounting media onto the supply cassette.
- Loading the supply cassette into the imagesetter.
- Performing **Set Loading** and **Cassette Sign In**.

5.2.1 Unloading the Supply Cassette

1. To unload either the **small** (12 inch) or **medium** (20 inch) cassette, open the Supply cassette compartment door **[1]**, and push back the locking bar **[2]**.

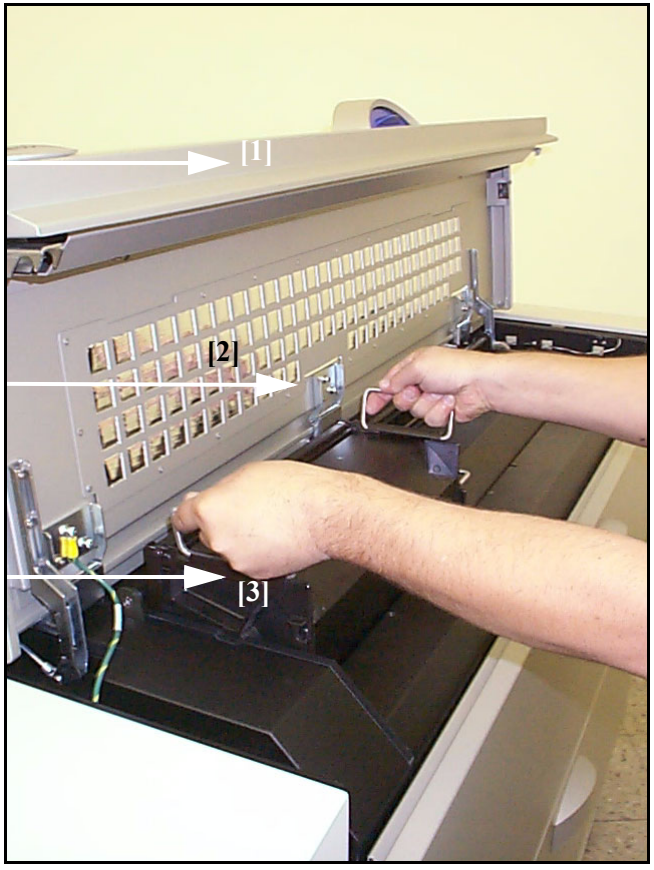


Figure 21: Unloading the Small or Medium Supply Cassette

2. Remove the cassette **[3]** and take it to the darkroom.

3. To unload the **large** (34 inch cassette **[1]**, open the Large cassette door **[2]** (located on the front on the imagesetter) and then open the additional **inner** door **[3]**.



Figure 22: Unloading the Large Cassette

4. Remove the cassette and take it to the darkroom.

5.2.2 Mounting Media onto the Supply Cassette

1. Check that the film you intend to load on the cassette is in the darkroom before you lock the door and turn **off** the lights.

CAUTION: Dolev 800V+/800V^2/800V^{3}requires a bright cyan light source for film development. Do not use red or yellow illumination!

2. Close and lock the door to the darkroom.
3. Turn **on** the bright cyan light.
4. Two (2) latches secure the cassette lid. To open the supply cassette, push the latches horizontally toward the center of the cassette, and pull up the lid until it is in a resting position.

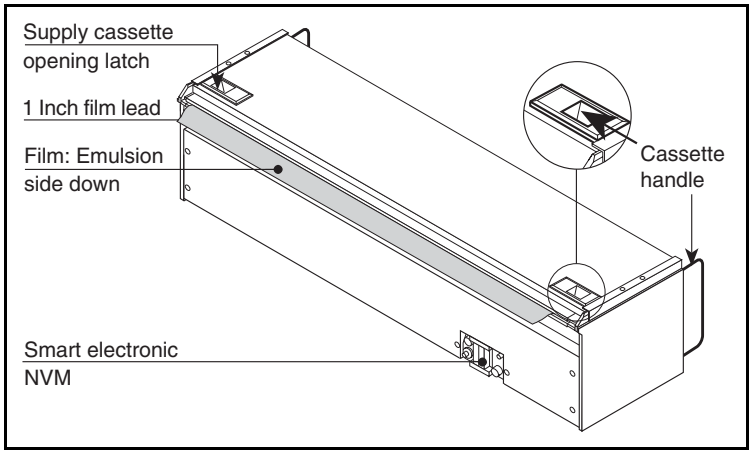


Figure 23: Opening the Supply Cassette

5. Grasp the outer surface of both flanges and lift the film spool out of the supply cassette.
   Two (2) flanges are attached to the spool, namely the **fixed** flange and the **removable** flange.

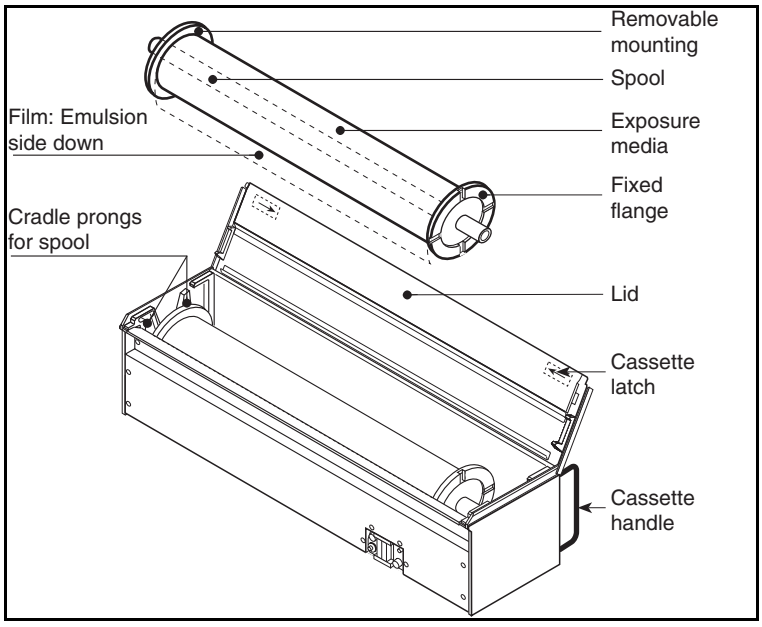


Figure 24: Lifting the Film Spool out of the Supply Cassette

6. Twist the **inner** rim of the removable flange and, using the supplied tool, remove it from the spool.
7. Place the new roll of film on the table.
   Note the film position: rolled away from the cassette, emulsion down.

Note: If the cassette contains a film roll, remove it from the spool. Place any unexposed film in a film case or container, and mark it.

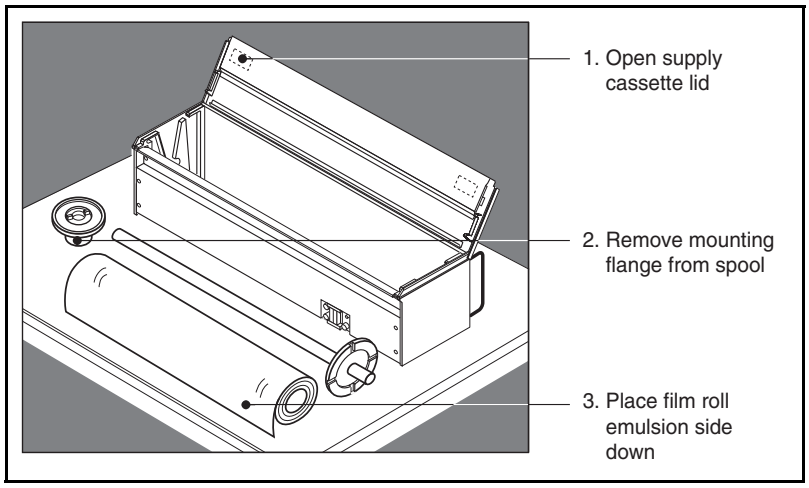


Figure 25: Removing the Film Spool

8. Grasp the spool by the **fixed** flange, and insert the spool through the film roll (film emulsion down).
9. Place the **removable** flange onto the spool, and twist it to tighten it on the spool.
10. Lower the spool into the cassette, so that its ends fit between the prongs of the cradle. Allow approximately 1 inch of film to stick out, over the edge of the cassette.



Note: If too much film sticks out, cut the excessive part (do not push it back).

11. Check that the film is straight (that is, parallel to the cassette lid), and shut the cassette lid.
12. Lead film cutter (supplied) can be used to trim the film to the required length.

5.2.3 Loading the Supply Cassette into the Imagesetter

Note: Before leaving the darkroom, and loading the cassette, double-check that you have protected any unexposed film.

To load a small or medium cassette:

1. Open the Supply cassette compartment door **[1]**, and push back the locking bar **[2]**.
2. Load the cassette **[3,4]** so that the film extends from the bottom of the cassette toward the rear of the imagesetter (that is, away from you).
3. Fold down the cassette handles **[5]**. Pull the locking bar forward.

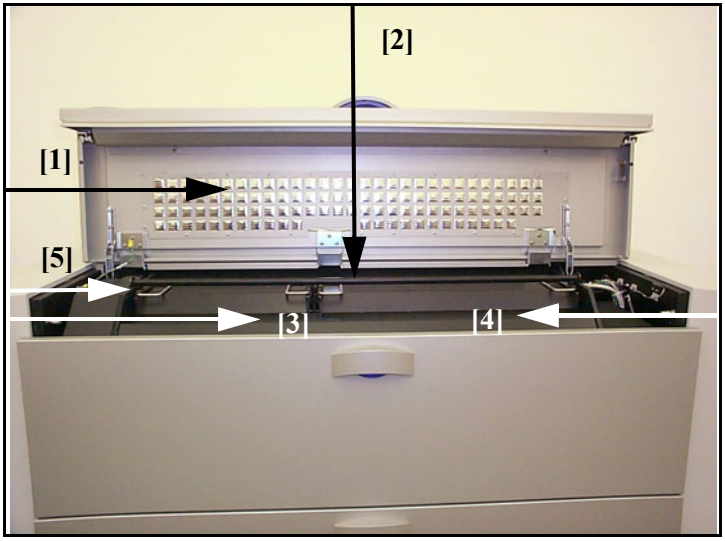


Figure 26: Loading the Small or Medium Cassette

4. Close the Supply cassette compartment door.

To load the large cassette:

1. Open the Large cassette door **[1]** (located on the front on the imagesetter) and then open the additional inner door **[2].**
2. Place the cassette on the inner door and slide the cassette **[3]** into place.

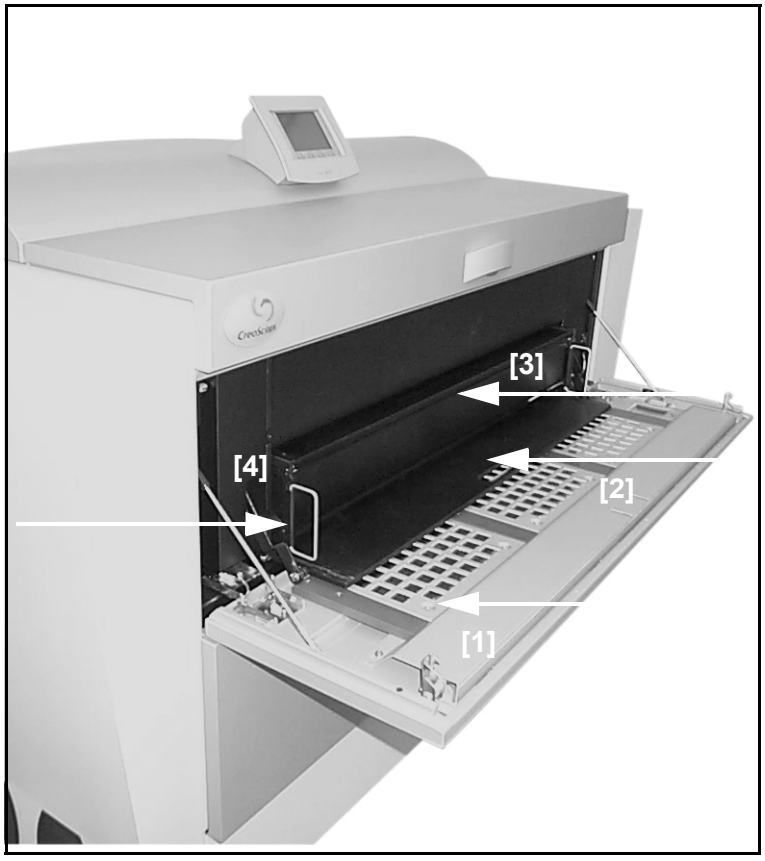


Figure 27: Loading the Large Cassette

3. Fold down the cassette handles [4] and close the inner cassette door.
4. Close the Large cassette door.

Note: At this stage you need to perform the Set Loading and Cassette Sign In procedures described later.

5.3 Set Loading (Automatic Media Loading)

The Set Loading procedure assists you during the loading process. During loading, the section of media exposed to light must be cut. **Set Loading** automatically loads a minimum length of media onto the drum, cuts the exposed media, and ejects it into the output cassette.

You must then unload and discard the length of film that was exposed to light. Do this before you begin your first exposure.

Set Loading may be performed via the Control Panel (as explained on the following page), or via the host workstation.

5.3.1 Performing Set Loading via the Control Panel

1. At **Standby**, press the <**UTIL**> soft key.
   The **Utilities** menu appears; the **pointer** cursor points to **Set Loading**.
2. Press the **DONE** operator button.
3. Press the **NEXT VALUE** operator button to toggle the **SML** in the Parameter area to **MED** or **LRG** as desired.



Note: To cancel the selection, press the **ESC** operator button.

4. Press the **DONE** operator button to confirm the selection of the desired supply cassette.
   The **pointer** cursor returns to the menu, and a beep indicates that the cassette was selected.

5. Press the <**DONE**> soft key to begin film loading from the supply cassette.
   When loading is completed successfully, the following appears on the Control Panel:



Figure 28: Dolev 800V+/800V^2/800V^3 Control Panel

The Control Panel is explained in detail in the Dolev 800V+/800V^2/800V^3 *User Guide, Chapter 1*.

6. Press the **ESC** operator button to return to the **Utilities** menu, or the <**ERROR**> soft key to see a list of errors (if such exists).

After performing Set Loading (via the Control Panel or the host workstation), proceed as follows:

1. Open the Output cassette door, and slide out the output cassette.
2. Open the output cassette, remove the exposed film, and dispose of the film.
3. Put the output cassette back in the imagesetter. You are now ready to expose film on the imagesetter.

For a detailed explanation, refer to section *5.4 The Output Cassette on page 69*.

5.3.2 Cassette Sign In

Whenever you load a new supply cassette into the imagesetter, you must Sign In the cassette.

Cassette Sign In records the type of media, manufacturer, batch number, and the length of media on the cassette.

The information is used to automatically select the correct exposure values for your specific media type. It is very important that you provide as much information as possible about the cassette media. Once you record this information, it is stored on the cassette and used during media exposure.

Cassette Sign In may be performed via the Control Panel (as explained below), or via the host workstation.

Performing Cassette Sign In via the Control Panel

1. At **Standby**, press the <**UTIL**> soft key. The **Utility** menu appears.
2. Select the cassette you are registering in the Media Info menu: **Medium, Small, Lower** or **Upper** (Lower and Upper refer to the large cassette).
   a. Update the required parameters (for example, cassette size, media type, media thickness).
   b. Select the media type: film or polyester plate.
   c. Select the media thickness: 4 mil or 7 mil.



Note: The media catalog number contains the code for the media thickness.

   d. Register the initial length of the media on the cassette.
   If the cassette contains less than a full roll of film, modify the length in the Parameter area.
   e. Select the vendor (manufacturer).
3. Press the <**DONE**> soft key.

5.4 The Output Cassette

The output cassette is track mounted on the imagesetter door. If the cassette is installed, the film is ejected into the cassette.

Note: The imagesetter may output film to an output cassette, or through an internal conveyor directly to a processor. The following explanations describe the output cassette only.

5.4.1 Unloading the Output Cassette

1. Press the handle **[1]** on the imagesetter Output cassette door **[2]**, and open the door.
2. Grasp the cassette **[3]** by its handle, and pull the cassette towards you to remove it.

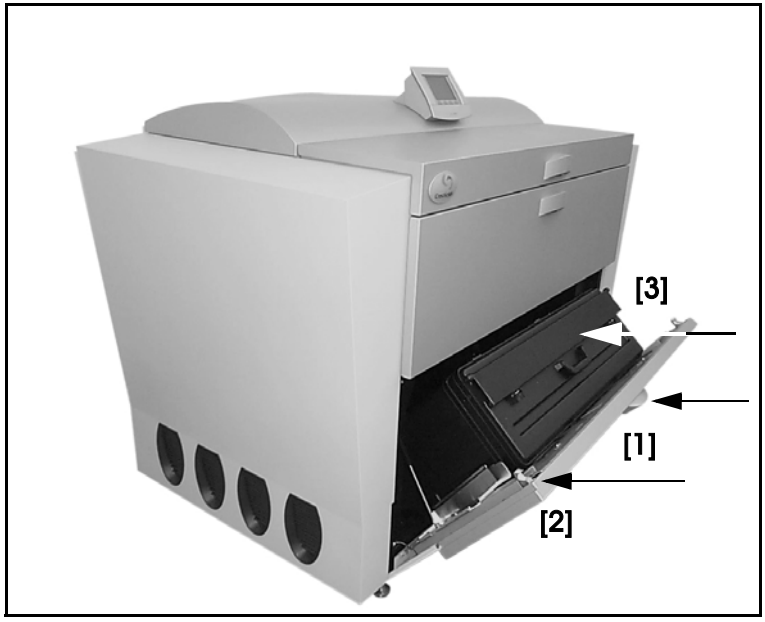


Figure 29: Unloading the Output Cassette

5.4.2 Developing Film with Off-line Processor)



CAUTION: Do not open the output cassette until you are in the developing area and the door is **LOCKED**.

1. Carry the output cassette to a darkroom which is equipped with a bright cyan light.
2. Close the developing room door and lock it. Turn **on** the cyan light.
3. To open the output cassette, press the three (3) fasteners on the front of the cassette and open the cassette lid upwards.
4. Remove the exposed films one at a time, and feed each piece of film into the processor.



Note: You may find one (1) narrow strip of film in the cassette (that is, less than 4 inches wide). This is the piece of film that was exposed to light when a new supply cassette was loaded onto the imagesetter. Dispose of this waste film.

5. Depending on your processor, you receive a signal from the processor when you are allowed to feed each subsequent film. When you have fed the last film into the processor and received the signal that the feed is complete, you may unlock the door.



Note: Be sure to check the bottom and sides of the cassette carefully for any film that may have slid into the base of the cassette.

6. Load the output cassette back into the imagesetter, and close the output cassette door.

5.4.3 Developing Film (In-line Processor)

1. Align the imagesetter to the in-line processor with lips locatedo n the back of the imagesetter.
2. Connect the communication cable between the processor and the imagesetter.
3. Change the selector postion to **in-line** mode.
4. Send a **setloading** from each cassette: **Small, Medium and Large**.
5. Verify **normal feed** via the in-line processor.

5.5 The Punch System

Creo offers a leading edge, customer-defined punch system for the Dolev 800V+/800V^2/800V^3.

The punch system is used by printers to eliminate the need for mounting film to carrier sheets, manual registration and punching.

A maximum of 10 punch assemblies can be installed in the imagesetter width direction, on the right flange of the Dolev 800V+/800V^2/800V^3 drum.

To assist Creo and the customer in the punch system definition, the Punched Film Layout form has been prepared. The customer and the Creo engineer should complete all requested values on this form.



Note: Since numerous configurations are available and some restrictions exist (such as, minimum hole distances, hole size, and hole placement relative to the exposed area), Creo assists in the punch system definition. This ensures that all details regarding the customer's punch system are transmitted to the local Creo experts.

Creo then prepares a confirmation drawing for customer approval. This drawing is subsequently used by the Creo engineer to actually install the punch system.



Note: Although filling the form is not a pre-requisite for ordering a punch system, the system can not be installed without the customer-approved confirmation drawing supplied by Creo.

5.5.1 Punch System Design and Operation

The moving part of the punch assembly is the unit. It can be either at the **OUT** position or at the **IN** (that is, punching) position.

The moveable cutting blade of the punch is the rod. As the unit, the rod can be either at the **OUT** position or at the **IN** position.

Both rod and unit are activated by air cylinders. There are two (2) double-action air cylinders (not spring-activated) per punch assembly. The punch system therefore requires a continuous, external air pressure supply for operation.

An additional operation of every punch assembly is the ejection of used film slugs from the system. Three (3) blasts of compressed air are used to achieve this.

The film slugs are collected into a large black hose, located near the unloading cassette. You should empty this hose two (2) to four (4) times per month.



Note: This operation is performed following the film punch, and before moving the punch rod to its OUT position.

The following describes a typical punching sequence:

Sequence	leads to	Result
Unit IN◊	-->	brings unit to punching position
One (1) sec. delay◊	-->	allows pressure stabilization
Rod IN◊	-->	executes film punch
One (1) sec. delay ◊	-->	allows pressure stabilization
Three (3) blasts of air◊	-->	ejects used film slug
One (1) sec. delay◊	-->	releases pressurecompletely
Rod OUT	-->	returns to OUT position
One (1) sec. delay◊	-->	allows pressurstabilization
Unit OUT◊	-->	returns unit to OUT position

5.5.2 Punch Calibration

The calibration of the punch system should be done only after the exposable area is calibrated.

1. After installing the punch system, expose a full format with punch requested, without alignment to punch (AutoArrange or Single with alignment "none" see figure above).
2. Check that the file is still exposed entirely after the punch system is installed. If not, repeat exposable area calibration.
3. Check that the central punch hole is exactly at the position across the center of the file. If not, calibrate the punch central hole.

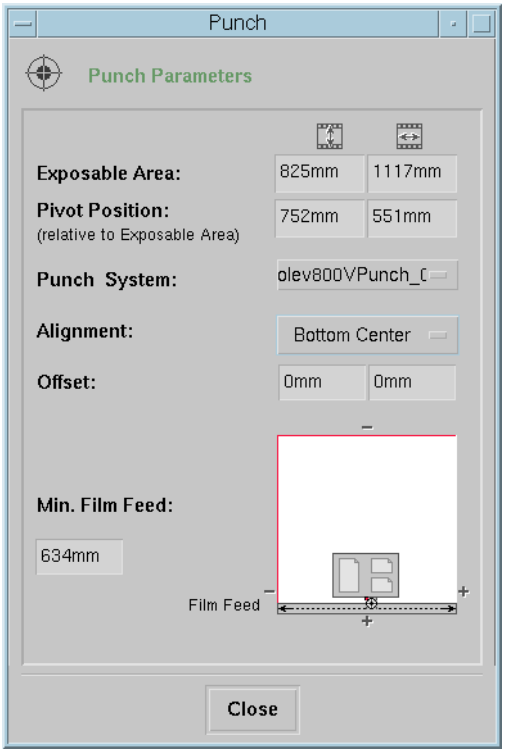
4. Only after the central hole of the punch system is calibrated to the full format center, continue with the rest of the punch-system's calibration. After calibration is complete, check again exposure of a full format file and the location of its center in relation to the punch system.
5. Start the punch pivot calibration by setting the punch pivot to 820 H (Center Height), 558 W (Center Width) [NVM screen, Cri, Service Tables, Punch Settings]. Drag a full format file on an expose template, request bottom-center alignment to the punch with a -10,0 mm offset from pivot [job ticket launcher, expose dialog, punch subdialog].
    a. If the Brisque announces that the file exceeds the exposable area on the left or right side, add/subtract to the punch W pivot setting (in the plotter) according to the message.
    b. Initiate the plotter configuration dialog, press the "punch" button in the dialog and check that the punch pivot is identical to the pivot value entered in the plotter.
    c. If the Brisque announces that the file exceeds the exposable area on the top or bottom side, change the alignment of the file now requesting bottom-center alignment, with a -10± (exceeding value), 0 mm offset from punch pivot.
    d. Repeat the exposure of the file.
    e. Check again that the punch central hole is exactly at the requested offset from the file's bottom center. If not, adjust the punch pivot setting accordingly. Repeat exposure after initiating the plotter configuration dialog and check offset again.

5.5.3 Defining Punch Parameters

Use the **Punch** option to designate a punch system and define the punch alignment parameters.

To define the Punch parameters:

1. Click the **Punch** check box. The **Params** button next to it is enabled.
2. Click **Params**. The Punch dialog box appears. The options that appear in the window vary, depending on the connected output device, and on the selected punch system.



Item	Description
Exposable Area	Displays the maximum image size supported by the imagesetter. The exposable area is defined according to the cassette's exposable area. **Exposable Area** = cassette's size - offset values of output device. Varies between Dolev 4Press and Dolev 800. You cannot edit these boxes.
Pivot Position	Displays the existing punch configuration. They indicate the position of the punch hole that is defined as the pivot (normally the round hole). You cannot edit these boxes. (If the selected **Punch System** is **External**, this option is unavailable.)
Punch System	Enables you to select a punch system from a list of available systems.
Alignment	Designates the point on the image to be the reference point (for example, the top-left) when you position the image relative to the punch. If you select **None**, or **External**, you will not be able to define an offset.
Offset from punch	Defines exactly where the reference point (top-left, bottom-right, and so on) is positioned relative to the punch. Default is 0,0. If the defined Alignment is None or External, the **Offset** boxes are disabled. **Note:** Each punch system has one origin (pivot), or reference point, from where the measurements of the alignment are made. The plus and minus signs in the R-icon indicate a positive or negative offset and the direction. A positive offset moves the reference point down and to the right. A negative offset moves the reference point up and to the left.
Minimum Film Feed	Defines the minimum length of film that is fed when the punch is activated. (If the selected **Punch System** is **External**, this option is unavailable.)

3. From the **Punch System** list box, select a punch system. The **R-icon** in the bottom-right of the window reflects the general position of the punch system and the exposure on the film, relative to the expose area.
4. From the **Alignment** list box, select an alignment option The **R-icon** reflects your selection.
5. In the Offset **Vertical** and **Horizontal** boxes, type the distance of the reference point from the Punch.
6. Click **Close** to save the settings and to return to the Expose window.



Note: The **Page** icon below the page **Inventory** button indicates that the **Punch** option is active.

6

Data Configuration Settings

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6.1 Connecting to the Host

The TurboScreening Processor (TSP 100) is a high speed Screening Processor, that performs on-the-fly data combine and screening functions.



See the *TSP Board Installation Guide.*

6.1.1 Host Power On

Turn on the power of the Host system. (Refer to the Host manuals, if necessary.)

Software Version Check

Before proceeding, ensure that the operating software versions being used on both the imagesetter and the Host are compatible.

Following power-on, the imagesetter automatically loads its software.

1. When the system has loaded, note the current imagesetter software version.
2. Determine the software version currently running on the Host. (Refer to the Host manuals, if necessary.)
3. Ensure that the imagesetter software version is fully compatible with the software currently running on the Host.

Updating Imagesetter Software

If the current software versions are **not** compatible, you will most likely need to update the operating software on the imagesetter.

1. Obtain imagesetter software which is compatible with the Host operating software.



Note: If different update instructions accompany the update disk, follow the new instructions.

2. Ensure that the software update diskette is **not write-protected**. Insert the new software diskette into the floppy drive on the imagesetter.
3. Reset the imagesetter. The imagesetter will boot from the diskette and the operating system software update will be executed.

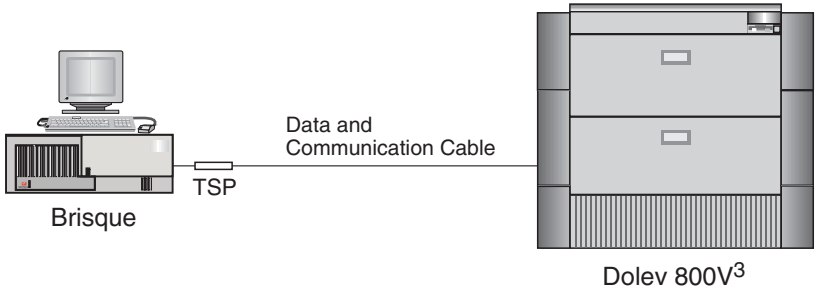
6.2 Data Connectivity

WARNING: Do not connect the TSP cables unless the Dolev 800V+/800V^2/ 800V^3 is switched **off**.

The Dolev to Brisque connectivity consists of a cable connection for data transfer and communication between the Dolev and the Brisque.

Following are the locations of the TSP boards on different Brisque platforms for the Dolev 800V^3.

Brisque Platform	Slots	Isdev	TSP Cable	Laser #
F50	# 5	nsp0	TSP1*	Laser1*
6F1	# 7	nsp0	TSP1*	Laser1*
44P-170	# 4	nsp0	TSP1*	Laser1*



Connecting TSP Cables - Dolev 800V^3

6.2.1 Using TSP Data Cable Link (Data Connectivity) - Dolev 800V^3

To connect the TSP data cable (p/n - 199D06226) link between the Brisque and a Dolev 800V^3:

1. Connect the cable marked TSP **(Dolev 800V^3 only)** to the TSP Board on the Brisque (*see table on page 79*).
2. Connect the other end of the TSP cable to connector COM 3 or 4 on the MB-SOMC board (*see Figure 30 on page 80*).



Figure 30: TSP Connector on MB-SOMC Board

6.3 Accessing the Output Device Configuration

The Output Device Configuration on the Brisque is used to configure the Dolev 800V+/800V^2/800V^3, to view the device parameters, to define Press Formats, and to perform Excurve and Tone Reproduction.

To access the Output Device Configuration:

1. From the Brisque Launch Pad, open the **Setup** panel.

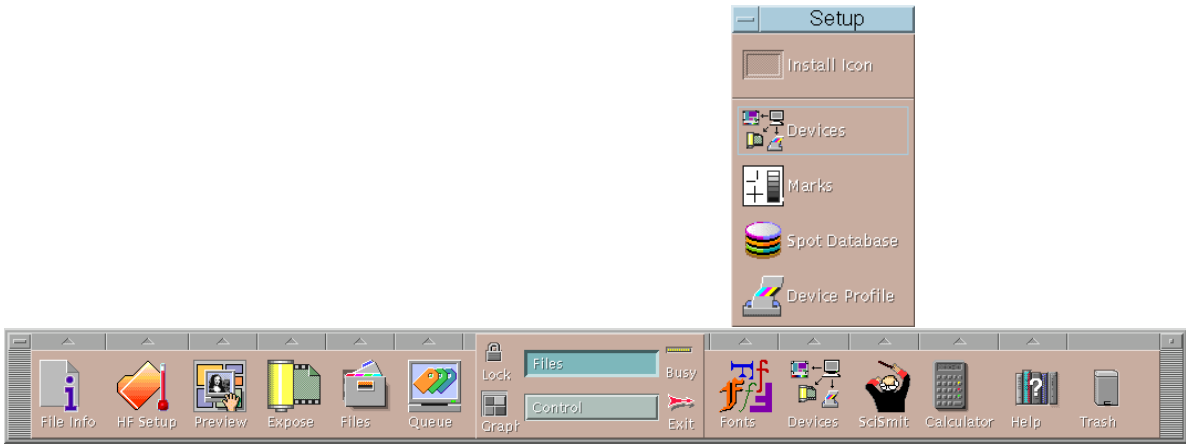


Figure 31: Brisque Launch Pad with Setup panel open

2. Double-click the **Devices icon**; the Output Devices Handling window appears.

6.3.1 The Output Device Handling Window

From the Output Devices Handling window all configurations of the output devices are performed. From here new devices are configured, currently configured devices modified or deleted and previously configured devices are re configured periodically.

All the device groups, device families and device configurations are displayed in this window, as well as the various operations relevant to each of the selected configurations. The device specific operations and the general operations relevant to all output devices are accessed via the available operation buttons in the Operations section.

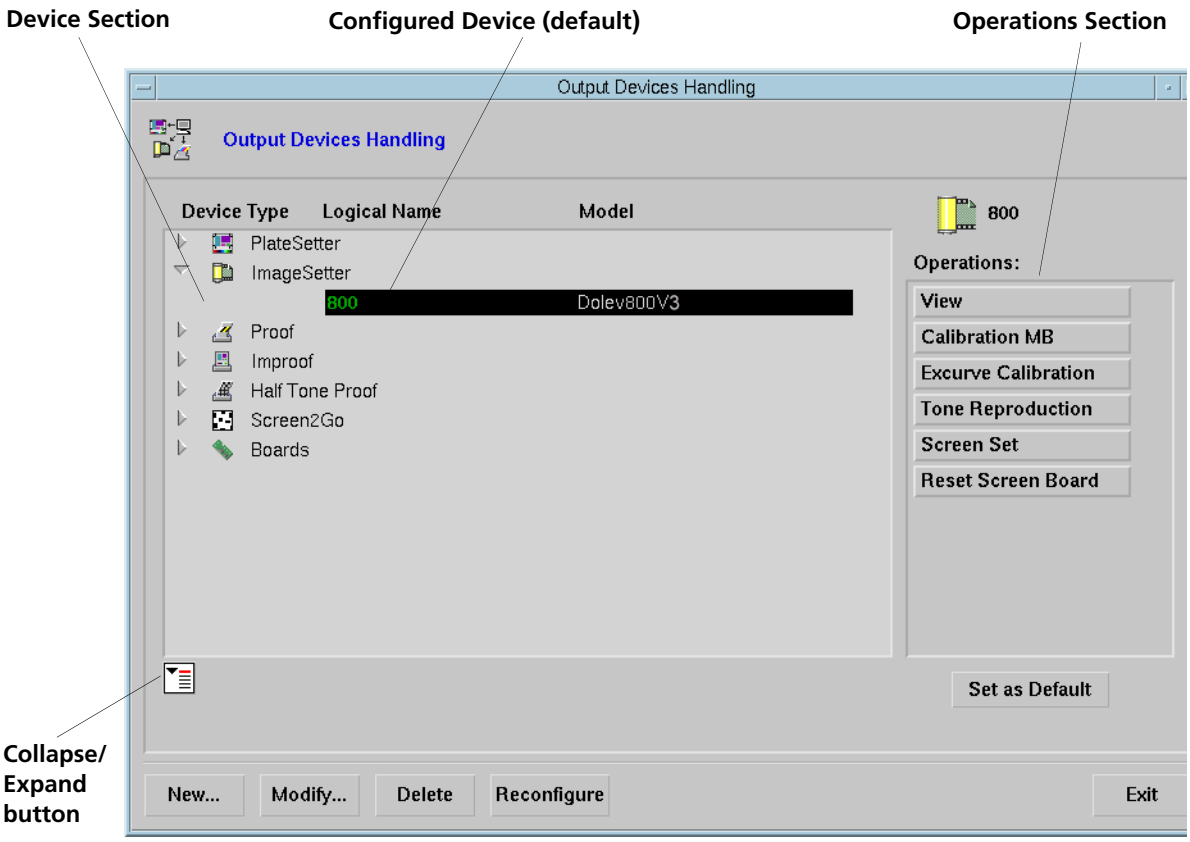


Figure 32: Output Devices Handling Window

Item	Description
Device section	**The section is comprised of three columns:** **Device Type** - Displays the Device Groups such as Platesetter, Imagesetter, Proofer, Imposition Proofer and Halftone Proofer. In this case it would be a Imagesetter. The list of Device Families appears under each group such as Dolev. Each level is locally expandable or collapsible, using the arrow on the left. **Logical Name** - This column displays the name of a specific configuration. When highlighted, relevant operations are enabled (in the Operations section). **Model** - This column displays the physical device name.
Expand or Collapse icon	Click to expand or collapse the entire list of devices to show or hide all details.
New...	Click to open the New Device Wizard and start configuring a new device.
Modify...	Click to modify parameters for an existing output device.
Delete	Click to delete an established configuration to an output device.
Reconfigure	Reestablishes the connection to the selected device. Click **Reconfigure** to reconnect the device (Online mode); a message confirms the connection or warns of the failure to connect. When a device is configured, the data is read and registered in the Brisque database. Disconnection of the device or failure of a component, is not logged in the Brisque, and no mechanism is currently available to warn of the device disconnection. We recommend that you reconfigure the device before every use.

Item	Description
Operations section	Operations related to the output devices are activated from here. Operations are enabled when a particular configuration is selected. Some operations are connection-specific, others are applicable to all output devices.
Set as Default	Not relevant.
Exit	Exit the Output Devices Configuration window.

6.4 Configuring the Dolev 800V+/800V^2/800V^3 Imagesetters

To check if a Dolev 800V+/800V^2/800V^3 imagesetter is configured:

1. In the Output Devices Handling window, click arrow next to the **imagesetter** icon.
2. Click the arrow next to the **Dolev** icon. If a Dolev is configured, the connection to the Brisque is displayed under the **Dolev** icon; the name is in **green** if it is the default imagesetter.

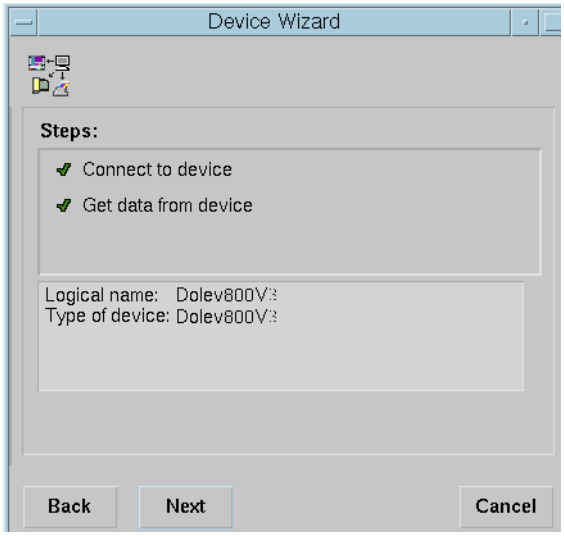
To configure a new Dolev 800V+/800V^2/800V^3 imagestter:

1. In the Output Devices Handling window, click **New...**; the following dialog box opens.



2. From the **Device Group** list box, select **Imagesetter**; the **Device Family** list box is labeled Dolev.
3. In the **Screen Board** drop-down list, choose **TSP 0.**

4. Click **Next**; a device summary is displayed. Now the Device Type is identified as `Dolev800V3`.

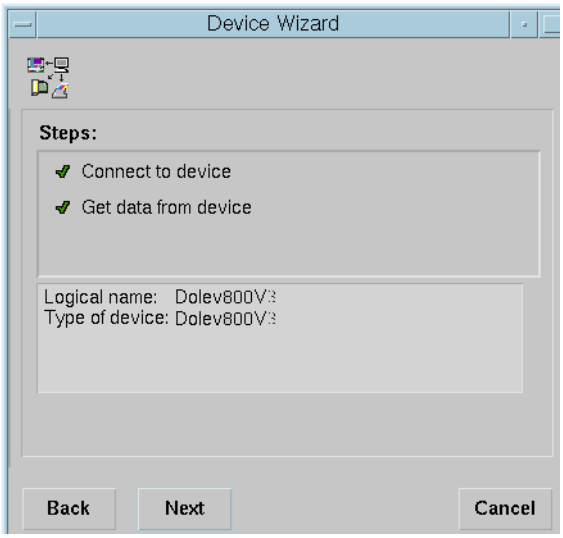


To modify the Dolev 800V+/800V^2/800V^3 imagestter parameters:

1. From the Output Devices Handling window, select the **Dolev imagesetter** configuration and click **Modify...**; the following dialog box opens. The Device Model name, for example **Dolev800V^3**, is returned from the connected device.



2. Click **Next**; the following dialog box opens.



3. Click **Save**, to save the configuration. If the update was successful, a confirmation message is displayed for a few seconds. The modified connection is displayed in the Output Devices Handling window, under the **Dolev** icon.

To delete the Dolev 800V+/800V^2/800V^3 imagesetter configuration:

1. From the Output Devices Handling window, select the appropriate **Dolev** configuration, then click **Delete**; the delete confirmation is displayed.
2. Click **Yes** in the confirmation dialog to delete; the configuration is removed from the Output Devices Handling window.

To Reconfigure the Dolev 800V+/800V^2/800V^3 imagesetter:



Important: In case of failure, check the physical connection to the device, then try to reconfigure.

1. From the Output Devices Handling window, select the **Dolev** configuration.
2. Click **Reconfigure**. The Brisque reads the data from the device and confirms the connection. It displays a confirmation dialog for a few seconds, if the device has been reconnected. Otherwise, a failure message is displayed.

6.5 Width & Height Offset Adjustment - Exposable Area Calibration

Adjustment offsets for max. expose area on the film media:

Create maximum size expose file (812 mm H by 1117 mm W) with the "CreateFile" application (Brisque).

Go to **Tool Operation > Setup >Service tables> Machine setting**:

Offsets are in mm		
Height Small offset:	48 -52	[48]
Height Medium and Large offset:	70-74	[61]
Width offset:	48-52	[30]
Feeder offset	19-22	[50]
Roller offset	60-65	[60]

Correct offsets according to location of the exposed area on the film media.

Go to **Tool Operation > Setup >Service tables> Margin setting**:

Home Margins		
Width	30	[30]
Lower Cst Height	5	[5]
Medium Cst Height	5	[5]
Small Cst Height	5	[5]
Upper Cst Height	5	[5]

End Margins		
Width	40	[40]
Lower Cst Height	8	[8]
Medium Cst Height	8	[8]
Small Cst Height	8	[8]
Upper Cst Height	8	[8]

[] Default numbers

Important parameters:

Max film feed (default 1180 mm). [NVM screen, Cri, Factory tables, Plotter Description]

1. The Feeder value is calibrated by loading a requested film length [Util screen, Film, Load Media]. If the plotter did not load the requested length add/subtract the difference to the Feeder value in the Plotter Setting dialog.

   Example:

   If 500 mm of film was requested, and the loaded film is measured as 508 mm, add 8 mm from the Feeder value (50 mm default) and insert 58 mm to the Feeder value.

2. The Roller value is calibrated with the plotter's side cover removed. When the plotter loads film into the drum the roller should be 5 mm from the film's end. Use a piece of paper to measure the actual distance of the roller from the film's end. The difference should be added/subtracted to the Roller value in the Plotter Setting dialog.

   Example:

   If 8 mm is measured from the roller to the film end, subtract 3 mm from 60 mm (default value) and insert 57 mm to the Roller value.

3. To calibrate the Film Start value expose a calibration file (lw file named "OFFSET", with horizontal and vertical rulers which starts from the beginning of the file) from the Brisque to the imagesetter's small cassette. If the calibration file is covered in the H direction or is not 5-7 mm from the film edge, measure the distance of the file from its proper position and add/subtract it to the Film Start field (Height Small Offset).

4. To calibrate the Film End value repeat the previous step for the medium or large cassette, and update accordingly the Film End field.

5. Expose a full format file (812 mm * 1117 mm) from the Brisque to the plotter. Check the film for complete exposure (check that the file is exposed 812 mm * 1117 mm).

    a. If the file is covered in the W direction, add (if covered at the beginning of the file) or subtract (if covered at the end) {} to the W Expose Offset (Enc. ck) field.

    b. If in the W direction the beginning of the file is not 20-30 mm from the film edge, add/subtract to the large cassette W home margin.

    c. If in the W direction the end of the file is not 30-40 mm from the film edge, add to the large cassette and the W end margin.

    d. If the file is covered in the H direction add/subtract to the H home and end margins.

    e. If the Brisque provides a message 'Exceeds media width...', check the following:

        - Check that the Micro version is 1.058 and up
        - Check that the large cassette home margin + cassette end margin are less than the media width (812)

        If both conditions are not met, subtract from the width or height home/end margins.

    f. If a punch system is installed in the plotter, check in the Brisque that the exposable area field [punch subdialog in the expose dialog] shows 812 mm * 1117 mm. If not, check step 5 again.

    g. If 1- 5 are not reconcilable, then increase the Max Film Feed and repeat the entire calibration procedure.

    h. Expose the file again and check for the file's calibration.

7

Res-Intensity Calibration

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Measuring the Density on the Exposed Strips 101
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7.1 Dolev 800V^3 Calibration Workflow

To guarantee high-quality exposures, a unique laser intensity is required for each plotting resolution.

- If the laser intensity is too low, the exposure is too light and quality is lost (that is, black areas are **not** uniform, and thin lines and small text may disappear).
- If the laser intensity is too high, thin lines may become too thick and small text may be covered. In addition, the life of the laser is shortened.

To calibrate laser intensity, perform the following steps for each exposure resolution:

1. Prepare exposure strips.
2. Set an exposure resolution for the strips.
3. Expose the strips.
4. Use a densitometer to measure the density on the exposed strips of film. Write down on paper the intensity used to expose the best black strip of film at **each** resolution.
5. Record the new laser intensity values. Enter the intensity for each plotter resolution into the Resolution Intensity Table.
6. Save the new laser intensity as a standard (Default).

7.2 Film Specifications

The standard film will be orthochromatic (red sensitive), requiring a bright cyan safety light. (For more details, refer to the film manufacturer's recommendations.)

Although the film must be loaded into its cassette in a suitable darkroom, following this initial step, routine film handling can be performed under normal daylight conditions. Direct sunlight should always be avoided.

7.2.1 Imaging

Attribute	**Specification**
Wavelength	633 – 670 nm
Image Quality	
Dot Production	2 % - 98% @150 line screen 1% - 99% @150 line screen with correction table
Dot Uniformity	+/- 1%
Dmin	<=0.04
Dmax	>=5.6

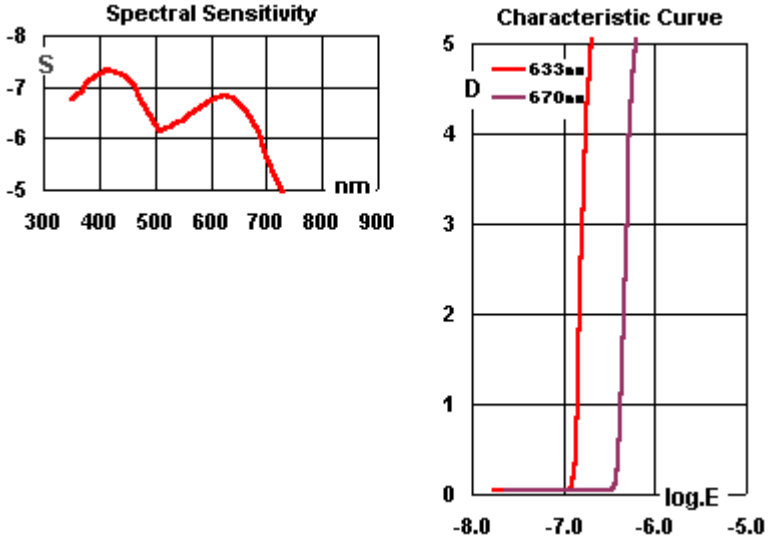


Figure 33: : Film spectral sensitivity and characteristic curve

7.2.2 Chemistry

Creo supports only Creo CS HDF Developer 1+2 in conjunction with Creo Recording film.

7.2.3 Film Handling

Attribute	Specification
Safelight	EncapSulite T10/S10/ND.4 green or EncapSulite T20/ND.75
Storage	Average 18×°C-21×C (64.4×°F-69.8×F) Maximum 25×°C (77×°F) Minimum 4×°C (39.2×°F) No humidity control required
Film transportation	Temp up to 32°C (89.6×°F) Up to 14 days by truck, up to 3 days by air
Film handling	Daylight loading conditions (DL)
Film disposal and Recycling	Possibility to recover silver by specialist

Hard dot film is more sensitive to heat than rapid access film.

It is important not to exceed the specified storage and transportation temperature specification.

Critical conditions

Shipment: up to 50°C (122°F) maximum 2 x 12 hours.

Storage: up to 28°C (82.4°F) allowed for 3 continued weeks per year.

The glue of the roomlight packaging might not withstand those extreme values. If such an extreme condition was faced, the roomlight packages should be visually checked. If the edge tape is loose, the film might have been exposed to light and consequently damaged.

7.2.4 Dimensions

Complies with ISO 3772 Photography:
Rolls of sensitized material for the pre-press industry – Dimensions and related requirements.

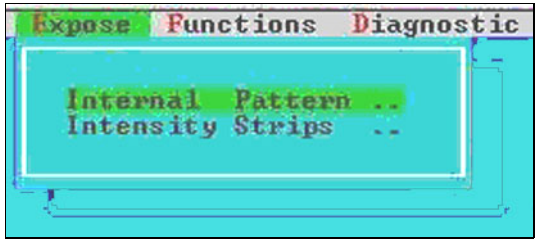
Imagesetter	Width (cm)	Width (Inch)	Spec. (*)
Dolev 800V/V^2/V^3/V^4	30.5	12	
Dolev 800V/V^2/V^3/V^4	50.8	20	
Dolev 800V/V^2/V^3/V^4	83.8	33	(*) O = Emulsion out I = Emulsion in 7 = Core 71.9 mm DL = Daylight Load

7.3 Preparing Exposure Strips

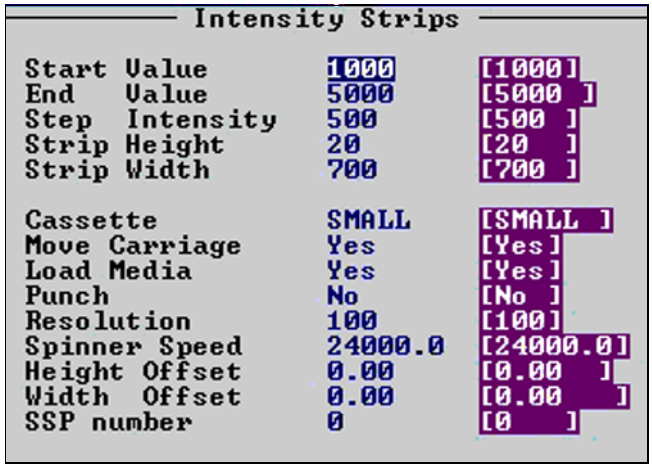
In this step you use automatic functions to create exposure strips.

On the Host Workstation:

1. Access the Remote mode of the imagesetter.
   The **Util Main** screen appears.
2. Select **Expose** from the **Util Main** screen; the **Expose** menu opens.



3. Select **Intensity Strips** from the **Expose** menu to define the parameters for the generation of the intensity strip.
   The **Intensity Strips** form appears.



Parameter	Range	Default	Do the following...
Start Value	300 - 4000	1000	Enter the value of the first intensity strip, for example, 2000.
End Value	1000 -11000	5000	Enter the value of the last intensity strip, for example, 10230.
Step Intensity	100 - 4000	500	Enter the value of the gap between intensity strips, for example, 800.
Strip Height	10 -1000	20	Enter the height of the intensity strips in [mm], for example, 5.
Strip Width	0 - 1180	700	Enter the width of the intensity strips in [mm], for example, 100.
Cassette	-	SML	Toggle to the size of cassette currently used.
Move Carriage	-	Yes	Toggle this field to **Yes** to use **exposing** mode (that is, **not** simulation mode).
Load Media	-	Yes	Toggle this field to **Yes** to load film into the imagesetter (that is, **not** simulation mode).
Spinner Speed	3000 - 14000	13800	Enter the speed of the spinner in [RPM], for example, 13800. **Note:** This resolution-dependent field affects the quality of the exposure.

Parameter	Range	Default	Do the following...
Data Frequency	12.00 - 33.00	25.00	Enter the frequency used to transfer the data, for example, 25.00.
SSP number	0 - 500	0	Enter **0** for the number of lines after which the plotter performs **stop spiral**.
Resolution	30.00 - 200.00	100.00	Enter 1 resolution (in mm and equal in height and width) per exposure, for example, 100.00. After you expose the strip, repeat the entire procedure for each resolution. **Note:** If you wish to use **Half Resolution**, set the **Half Res** field (in exposure format in the Host) to **Yes** and begin the exposure process from the beginning.
Height Offset	0 - 900	0	Enter the distance in height between the origin of the imagesetter and the start of the strips exposure.
Width Offset	0 - 1180	0	Enter the distance in width between the origin of the imagesetter and the start of the strips exposure.



Note: The film offset in height and width can be left at **0,0**.

7.4 Exposing the Strips

1. Press **F6 and Done.**
   The **Service** screen appears. It indicates the status of the OMC and CRI, the messages, and the active task. You may press <**P**> to display the **Expose Parameters** window, or <**Enter**> to exit to the Util Main screen.
2. Develop the film strips.



Note: You can expose calibration strips via **Brisque>Calibration**.

7.5 Measuring the Density on the Exposed Strips

1. Place the exposed film on a light table.
2. Use a densitometer to find the density of the darkest area on the film. The reading must be between **4.2** and **4.4** (or as recommended by the film manufacture).
3. To find which exposed strip has the best density, look at the light strip that is exposed together with the black strip. Ideally, the transparent area should be 0%, and the black area should be 100%.



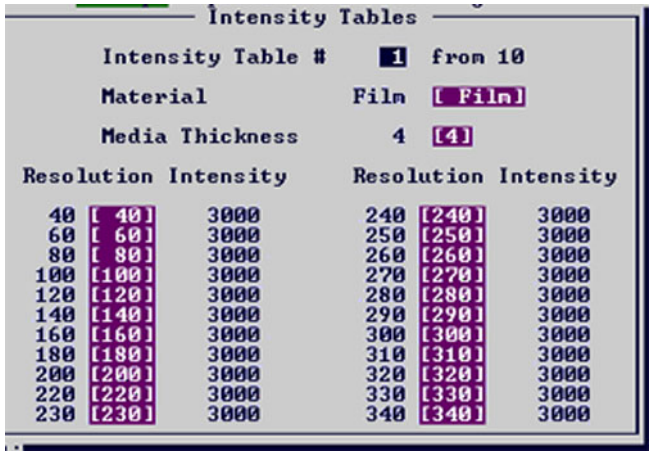
Note: The shape on the gray strip, whether it is a dot or line, must be smooth, sharp, and of high quality. When you find a gray strip with these qualities, you find the desired density on the black strip with which it is paired.

4. Write down the laser intensity that yields the best density.

7.6 Recording New Laser Intensity Values

1. Press the **Util** soft button on the Control Panel.
2. Select **Tools Operation** and press **Done.**
3. From the **Util** main screen, execute the following sequence: **Setup > Operator Tables > Intensity Tables**.

The following form appears:



4. Toggle the desired **Intensity Table** (1-10). Navigate using the **Next-Field** or **Shift + Prev-Field** soft buttons.
5. Modify the values for the active table, as follows:
   - **Material** [toggle field; default is **Film**].
     Leave this field as **Film**.
   - **Vendor** [toggle field; default is **None**].
     Leave this field as **None**.
   - **Media Thickness** [default is 4].
     Leave this field as **4** mil.
6. Enter the new intensity value for the relevant resolution and press **Done**. The new values will be saved.
7. Exit from **Tools Operation**.

8

Customer Training

This chapter describes the suggested training topics to be covered by the installation engineer.

Dolev Customer Training Outline.....104



8.1 Dolev Customer Training Outline

During the initial basic training, the customer is the responsibility of the Installation Engineer and is an integral part of the installation process. All the information covered in the User Guide and other documentation, such as the Troubleshooting video, should be brought to the attention of the customer.

It is important to cover as many topics as possible and also to train more than one operator on the site.

The training program outlined here should take about 3-4 hours and cover the following topics:

Introduction to the Dolev 800V+/800V^2/800V^3

1. General Description
2. Safety Procedures
3. Start-up/Shutdown
4. Control Panel basic operation and description
5. Loading film, placing cassette and media info into table
6. Unloading film, removing and replacing cassette
7. Expose cycle
8. Film, light and data flow; location of electronic box; static and dynamic optics
9. Processing film-safe light
10. Service utilities-which utilities are for user and which for Service Engineer only
11. Res intensity, Calibration and Res/Int tables
12. Preparing Excurves: Negative Excurves, Positive Excurves, Backup Excurves
13. Formats: Select formats and Setup formats; Punch formats - select and setup formats
14. Environment Requirements: Humidity and Temperature

15. Troubleshooting
    - Film stuck in different areas of machine
      Empty drum procedures
      Open drawer procedures
    - Commnication troubleshooting
    - In-line processor troubleshooting
16. Customer certification at end of training

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